

REAR ROOM

DUKE
UNIVERSITY



LIBRARY

REAR ROOM





VOLUME 12

October, 1939

NUMBER 1

BULLETIN OF DUKE UNIVERSITY

The School of Medicine

1939



PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL CATALOGUES AND BULLETINS

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

FOR BULLETIN OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY
THE SCHOOL OF MEDICINE



1939

DURHAM, NORTH CAROLINA

1939

FOREWORD

This bulletin is issued for prospective medical students. Admissions into any class are made only on the understanding that every decision of the Executive Committee shall apply to all students, even though it is made subsequently to their enrollment in the School. At frequent intervals the Executive Committee reviews the records of all students, and those whose progress has been unsatisfactory may be required to leave the School. ONLY THOSE WILL BE ADVANCED WHO, IN THE OPINION OF THE EXECUTIVE COMMITTEE, GIVE PROMISE OF BEING A CREDIT TO THEMSELVES AND TO THE SCHOOL. Students who wish to study at other medical schools during one or more quarters must have their programs approved, in advance, by the Curriculum Committee and, on their return, must present evidence that they have completed successfully work comparable to that of the curriculum during the quarters in which they were away.

1939

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

1940

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

SCHOOL OF MEDICINE CALENDAR, 1939-1940

1939

- Sept. 28. Thursday—Registration of students, and Autumn Quarter begins.
- Nov. 30-Dec. 3. Thursday-Sunday—Thanksgiving Holidays.
- Dec. 16. Saturday—Autumn Quarter ends.

1940

- Jan. 2. Tuesday—Registration of students, and Winter Quarter begins.
- March 16. Saturday—Winter Quarter ends.
- March 25. Easter Monday: a holiday.
- March 26. Tuesday—Registration of students, and Spring Quarter begins.
- June 3. Monday—Commencement.
- June 8. Saturday—Spring Quarter ends.
- June 17. Monday—Registration of students, and Summer Quarter begins (Junior-Senior students).
- July 4. Thursday—Independence Day: a holiday.
- Aug. 31. Saturday—Summer Quarter ends.
- Sept. 26. Thursday—Registration of students, and Autumn Quarter begins.
- Nov. 28-Dec. 1. Thursday-Sunday—Thanksgiving Holidays.
- Dec. 14. Saturday—Autumn Quarter ends.

The Treasurer's Office is on the third floor of the Administration Building on the West Campus, and is open daily, except Sunday, from 9 A.M. to 4:30 P.M.

The office of the Recorder and Dean of the School of Medicine is in Room M 133 of the Medical School, and is open daily, except Sunday, from 8:15 A.M. to 5 P.M.

For any further information, address THE DEAN, DUKE UNIVERSITY SCHOOL OF MEDICINE, DURHAM, N. C.

OFFICERS OF ADMINISTRATION

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., Litt.D., LL.D.
President of the University

ROBERT LEE FLOWERS, AM., LL.D.
Vice-President, Secretary, and Treasurer

WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D.
Vice-President

FRANK CLYDE BROWN, A.B., A.M., Ph.D.
Comptroller

CHARLES BLACKWELL MARKHAM, A.B., A.M.
Assistant Treasurer



WILBURT CORNELL DAVISON, A.B., B.A., B.Sc., M.A., D.Sc., M.D.
Dean of the School of Medicine

HELEN I. STOCKSDALE
Recorder of the School of Medicine

FACULTY OF THE SCHOOL OF MEDICINE

- TROGLER FRANCIS ADKINS, M.D., *Assistant in Obstetrics and Gynecology*,
M.D., Duke, 1936; Int. in Surg., Jan.-July, 1937, and Int. and Assistant Resident in
Obstetrics and Gynecology, Duke Hospital, 1937—
- F. VERNON ALTVATER, A.B., A.M., *Associate in Hospital Administration*.
A.B. and A.M., Duke, 1930 and 1932; Ass't. Sup't. and Superintendent, *Duke Hospital*,
1930—
- EDWIN PASCAL ALYEA, S.B., M.D., *Associate Professor of Surgery in
Charge of Urology*.
S.B., Princeton, 1919; M.D., Johns Hopkins, 1923; Int. in Med.; Int. and Ass't. Res.
in Surg.; Ass't. Res. and Res. in Urol., Johns Hopkins Hosp., 1923-1929; Ass't. and
Instr. in Surg., and Instr. in Urol., Johns Hopkins Med. Sch., 1925-1930; *Urologist*,
Duke Hospital, 1929—
- WILLIAM BANKS ANDERSON, A.B., M.D., *Associate Professor of Sur-
gery in Charge of Ophthalmology*.
A.B., Univ. of North Carolina, 1920; M.D., Johns Hopkins, 1924; Int., Union Memorial
Hosp., Baltimore, 1924-1925; Int., Massachusetts Eye and Ear Infirmary, 1925-1927;
Ophthalmologist, Duke Hospital, 1930—
- JAY MORRIS ARENA, B.S., M.D., *Assistant Professor of Pediatrics*.
B.S., West Virginia, 1930; M.D., Duke, 1932; Int. in Ped., Johns Hopkins Hosp.,
1932-1933; Ass't. and Instr. in Pediatrics, Duke Med. Sch., 1933-1935; Ass't. Res.,
Res. and Assistant Pediatricist, *Duke Hospital, 1933—*
- RALPH A. ARNOLD, B.A., M.D., *Assistant in Otolaryngology and Ophthal-
mology*.
B.A., Rochester, 1932; M.D., Buffalo, 1936; Int. in Stud. Health, and Int. and
Assistant Resident in Otolaryngology and Ophthalmology, Duke Hospital, 1936—
- THEODORE W. ATWOOD, A.B., D.M.D., *Associate in Dentistry*.
A.B., Duke, 1928; D.M.D., Harvard, 1932; *Dentist, Duke Hospital, 1934—*
- GORDON JOSEPH AXELSON, M.D., *Assistant in Endocrine Division,
Obstetrics and Gynecology*.
M.D., Duke, 1937; Int., City of Chicago Municipal Tbc. Sanitarium, May, 1937; Int.,
rotat., and Ass't. Res. in Med., Henry Ford Hosp., 1937-1939; *Assistant Resident in
Endocrine Division, Obstetrics and Gynecology, Duke Hospital, 1939—*
- HERMAN GLENN BAITY, Sc.D., *Lecturer in Public Health*.
A.B. and S.B. in C.E., North Carolina, 1917 and 1922; M.S. and Sc.D., Harvard,
1925 and 1928; Professor of Sanitary and Municipal Engineering, Univ. of North
Carolina; 1938—
- LENEX DIAL BAKER, M.D., *Associate in Orthopaedics*.
M.D., Duke, 1933; Int. in Orth. Surg. and in Gen'l. Surg.; Ass't. Res. in Orth.
Surg. and Res. in Orth., Johns Hopkins Hosp., 1933-1937; Res., Children's Hospital
School, 1936; Ass't. and Instr., Orth. Surg., Johns Hopkins Med. Sch., 1935-1937;
Assistant Orthopaedist, Duke Hospital, 1937—
- ROGER DENIO BAKER, A.B., M.D., *Assistant Professor of Pathology*.
A.B., Wisconsin, 1924; M.D., Harvard, 1928; Ass't. Res. Pathologist, Johns Hopkins
Hosp., 1928-1930; Ass't. in Path., Johns Hopkins Med. Sch., 1928-1929; Instr., 1929-
1930; Instr. in Anat. and Instr. in Path., Duke Med. Sch., 1930-1934; *Assistant
Pathologist, Duke Hospital, 1930—*
- SHERWOOD W. BAREFOOT, B.S., M.D., *Fellow in Dermatology and
Syphilology*.
B.S. in Med., North Carolina, 1936; M.D., Duke, 1938; Int. and Ass't. Res. in Med.,
Duke Hosp., 1938-1939; 1939—

GEORGE JAY BAYLIN, A.B., M.D., *Instructor in Anatomy and Assistant in Roentgenology.*

A.B., Johns Hopkins, 1932; M.D., Duke, 1937; Ass't. in Anat., Duke Med. Sch., 1934-1937; Int. in Surg., Sinai Hosp., Balto., 1937-1938; Voluntary Ass't. in Path., Guy's Hosp., London, Sept., 1938-Feb., 1939; *Instructor in Anatomy, Duke Medical School, and Assistant Resident in Roentgenology, Duke Hospital, 1939—*

DOROTHY WATERS BEARD, R.N., *Research Assistant in Experimental Surgery.*

R.N., Vanderbilt, 1929; Supervisor, Surg. Service, Vanderbilt Univ. Hosp., 1929-1931; Postgraduate Course in Surg., Charity Hosp., New Orleans, 1931-1932; 1938—

JOSEPH W. BEARD, B.S., M.D., *Assistant Professor of Surgery in Charge of Experimental Surgery.*

B.S., Univ. of Chicago, 1926; M.D., Vanderbilt, 1929; Ass't. and Instr. in Surg., Vanderbilt Univ. Med. Sch., 1930-1932; Int., Ass't. Res., and Res. in Surg., Vanderbilt Univ. Hosp., 1929-1932; Ass't. in Path. and Bact., Rockefeller Institute for Med. Research, N. Y. City, 1932-1935; Assoc. in Path. and Bact., Rockefeller Institute for Med. Research, Princeton, 1935-1937; *Assistant Surgeon, Duke Hospital, 1937—*

FREDERICK BERNHEIM, A.B., Ph.D., *Associate Professor of Physiology and Pharmacology.*

A.B., Harvard, 1925; Ph.D., Cambridge, 1928; Nat. Res. Council Fellow, Johns Hopkins Med. Sch., Dept. of Physiol. Chem., 1929-1930; 1930—

MARY LILIAS CHRISTIAN BERNHEIM, B.A., M.A., Ph.D., *Assistant Professor of Biochemistry.*

B.A., M.A., and Ph.D., Cambridge, 1925, 1927, and 1929; Fellow, Newnham College, 1927-1930; 1930—

WILLIAM ZIEGLER BRADFORD, B.S., M.D., *Assistant Professor of Obstetrics and Gynecology, and Director, Outside Obstetric Service, Charlotte, N. C.*

B.S., Davidson, 1924; M.D., Pennsylvania, 1928; Int., Howard Hosp., Graduate Hosp., Long Island College Hosp., Bellevue Hosp., 1928-1932; 1935—

WILLIAM HENRY BRIDGERS, B.S., M.D., *Assistant in Surgery.*

B.S. and M.D., Duke, 1936; Int., and *Assistant Resident in Surgery, Duke Hospital, 1936—*

HAROLD WILLIAM BROWN, A.B., M.S., Sc.D., Dr. P.H., M.D., *Professor of Preventive Medicine and Public Health.*

A.B., Kalamazoo, 1924; M.S., Kansas State, 1925; Sc.D., Johns Hopkins, 1928; M.D., Vanderbilt, 1933; Research Associate, Vanderbilt Medical Sch., 1927-1934; London School of Hygiene and Tropical Medicine, 1934-1935; Dr. P.H., Harvard, 1936; P.A. Surgeon, U. S. Public Health Serv., 1936-1937; 1938—

W. RAY BRYAN, B.S., Ph.D., *Research Fellow National Cancer Institute, Research Associate in Experimental Surgery.*

B.S., Carson Newman, 1928; Ph.D., Vanderbilt, 1931; Ass't. in Physiol., Vanderbilt Univ. Med. Sch., 1929-1931; Instr. in Physiol., Vanderbilt Univ. Med. Sch., 1931-1935; Ass't. Prof. of Physiol., Vanderbilt Univ. Med. Sch., 1935-1936; Ass't. Prof. of Experimental Pathology, Albany Med. Coll., 1936-1938; 1938—

JASPER LAMAR CALLAWAY, B.S., M.D., *Associate in Dermatology and Syphilology.*

M.D., Duke, 1932; B.S., Alabama, 1935; Ass't. Instr. in Derm. and Syphil., Univ. of Pennsylvania Med. Sch., 1932-1933; Int. and Ass't. Res. in Med., Duke Hosp., 1933-1935; Instr. in Phys. Diag. and Path., Univ. of Alabama, Jan.-July, 1935; Instr. in Derm. and Syphil., Univ. of Pennsylvania Sch. of Med., 1935-1937; Ass't. Field Physician, U. S. P. H. S., Feb.-July, 1937; *Assistant Physician, Duke Hospital, 1937—*

BAYARD CARTER, A.B., B.A., M.A., M.D., *Professor of Obstetrics and Gynecology.*

A.B., Delaware, 1920; B.A. and M.A., Oxford, 1923 and 1932; M.D., Johns Hopkins, 1925; member Obs. and Gyn. staff of New Haven Hosp. and Yale Med. Sch., 1925-1929; Assoc. Prof. Obs. and Gyn., and Head of Dept., Univ. of Va. Med. Dept., 1929-1931; *Obstetrician and Gynecologist, Duke Hospital, 1931—*

- RICHARD RUTLEDGE CARTER, B.A., M.D., *Assistant in Medicine*.
B.A., Oregon, 1935; M.D., Duke, 1938; Int. and Assistant Resident in Medicine, Duke Hospital, 1938—
- NORMAN FRANCIS CONANT, B.S., A.M., Ph.D., *Assistant Professor of Bacteriology and Mycology*.
B.S., Bates, 1930; A.M. and Ph.D., Harvard, 1931 and 1933; Research Fellow, Laboratoire de Parasitologie, Fac. de Médecine, Paris, 1933-1934; Research Ass't., Harvard Med. Sch. and Mass. Gen'l. Hosp., Jan. 1 to Oct. 1, 1935; Assoc. in Bact. and Mycology, Duke Med. Sch., 1935-1939; 1939—
- THOMAS BUCKINGHAM COOLIDGE, B.A., Ph.D., M.D., *Associate in Biochemistry*.
B.A. and M.D., Harvard, 1923 and 1927; Ph.D., Columbia, 1937; Int. in Med., Massachusetts General Hosp., 1927-1929; Tutor and Research Ass't. in Chem., Harvard College, 1929-1932; Ass't. in Biochem., College of Physicians & Surgeons, 1934-1935; Instr. in Biochem., Duke Med. Sch., 1935-1937; 1935—
- JANE STANLEY CRAIG, A.B., *Research Assistant in Anatomy*.
A.B., Goucher, 1935; Ass't. in Dept. of Embryol., Carnegie Institution of Washington, Balto., Md., 1935-1938; 1938—
- ROBERT LAWRENCE CRAIG, B.A., M.D., *Instructor in Neurology*.
B.A., Amherst, 1931; M.D., Johns Hopkins, 1935; Int. and Ass't. Res. in Med., 1935-1937, and Ass't. Res. in Neurol., Balto. City Hosps., 1937-1938; Ass't. in Neurol., Johns Hopkins Med. Sch., 1937-1938; Res. in Neuropsychiatry, 1938-1939; *Assistant Neurologist, Duke Hospital, 1939—*
- ERLE BULLA CRAVEN, JR., A.B., M.D., *Instructor in Medicine*.
A.B., Duke, 1925; M.D., Johns Hopkins, 1929; Ass't. in Path., Johns Hopkins Med. Sch., 1929-1930; Res. in Path., Int., Ass't. Res. and Res. in Med., Duke Hospital, 1930-1934; 1930—
- RAYMOND S. CRISPELL, A.B., M.D., *Associate Professor of Neuropsychiatry*.
A.B. and M.D., Cornell, 1917, 1920; Staff, Bloomingdale Hosp. and Instr. in Neuroanatomy, Cornell, 1920-1923; House Physician and Resident Neurologist, Bellevue Hosp., N. Y., 1921-1923; Fellow in Neurology, Univ. of Utrecht, Holland, 1925; Medical Director, Sahler Sanitarium, 1926-1933; *Neuropsychiatrist, Duke Hospital, 1933—*
- W. KENNETH CUYLER, B.A., M.A., *Research Fellow in Endocrinology*.
B.A., Texas, 1923; M.A., Western Reserve, 1929; Director of Clin. Lab., Dept. of Endocrinol. and Metabolism, Cleveland Clinics, 1929-1938; 1938—
- WILLIAM JOHN DANN, B.Sc., Ph.D., *Associate Professor of Physiology and Nutrition*.
B.Sc., Sheffield, 1925; Ph.D., Cambridge, 1930; Med. Research Scholar, Worsbipful Co. of Grocers, 1931-1933; Beit Mem. Research Fellow, 1933-1937; 1934—
- WILBURT CORNELL DAVISON, A.B., B.A., B.Sc., M.A., D.Sc., M.D., *Dean of the School of Medicine and Professor of Pediatrics*.
A.B., Princeton, 1913; B.A., B.Sc., and M.A., Oxford, 1915, 1916, and 1919; M.D., Johns Hopkins, 1917; D.Sc., Wake Forest, 1932; Int., Radcliffe Infirmary, 1915-1916; Ass't. Res., Assoc. Ped., Acting Pediatrician in Charge, Johns Hopkins Hosp., 1919-1927; Instr., Assoc., Assoc. Prof., Acting Head of Dept. of Ped., and Ass't. Dean, Johns Hopkins Med. Sch., 1919-1927; *Pediatrist, Duke Hospital, 1927—*
- JOHN ESSARY DEES, B.S., M.D., *Instructor in Urology*.
B.S. and M.D., Virginia, 1930 and 1933; Int. and Ass't. Res., Johns Hopkins Hosp., 1933-1937, and Res. in Urol., Ancker Hosp., 1937-1938, and Johns Hopkins Hosp., 1938-1939; *Assistant Urologist, Duke Hospital, 1939—*
- SUSAN COONS DEES, A.B., M.S., M.D., *Instructor in Pediatrics*.
A.B., Goucher, 1930; M.D., Johns Hopkins, 1934; M.S., Minnesota, 1938; Int., Johns Hopkins Hosp., 1934-1935, and Ass't. Res. in Med., Strong Mem. Hosp., 1935-1936; Int. in Path., Baltimore City Hosps., and Ass't., Johns Hopkins Protein Clinic, 1936-1937; Research Fellow in Ped., Univ. of Minnesota Hosp., 1937-1938; Ass't. Disp. Physician, Johns Hopkins Hosp., 1938-1939; *Assistant Pediatricist, Duke Hospital, 1939—*

MACDONALD DICK, B.A., M.A., M.D., *Associate in Medicine, Physiology, and Pharmacology.*

B.A. and M.A., Virginia, 1922 and 1923; M.D., Johns Hopkins, 1928; Int. and Ass't. Res., Vanderbilt Univ. Hosp., 1928-1930; Ass't. in Path. and Bact., Rockefeller Institute, 1930-1932; *Assistant Physician, Duke Hospital, 1932—*

GEORGE SHARP EADIE, M.A., M.B., Ph.D., *Professor of Physiology and Pharmacology.*

M.A. and M.B., Toronto, 1923 and 1921; Ph.D., Cambridge, 1927; Demonstrator in Biochem., Toronto, 1923-1925; Ass't. in Physiol., Dalhousie, 1927-1928; Assoc. in Physiol., Johns Hopkins Med. Sch., 1928-1930; 1930—

WATT WEEMS EAGLE, A.B., M.D., *Associate Professor of Surgery in Charge of Otolaryngology.*

A.B., Univ. of North Carolina, 1918; Grad. stud., *ibid.*, 1918-1919; M.D., Johns Hopkins, 1925; Int., Church Home and Infirmary, Baltimore, 1925-1926; Int. Ass't. Res. and Res. in Laryngol., Johns Hopkins Hosp., 1926-1929; Ass't. and Instr. in Laryngol., Johns Hopkins Med. Sch., 1927-1930; *Otolaryngologist, Duke Hospital, 1929—*

ELEANOR BEAMER EASLEY, B.A., M.A., M.D., *Assistant in Obstetrics and Gynecology.*

B.A., Idaho, 1928; M.A., Iowa, 1929; M.D., Duke, 1934; Int. and Ass't. Res. in Med., and Int. and *Assistant Resident in Obstetrics and Gynecology, Duke Hospital, 1934—*

SAMUEL ELGART, B.S., M.D., *Assistant in Biochemistry.*

B.S. and M.D., Tufts, 1934 and 1938; Int. in Med., Beth Israel Hosp., Boston, 1938-1939; *Assistant Resident in Biochemistry, Duke Hospital, 1939—*

JESSE HARRISON EPPERSON, B.S., *Instructor in Preventive Medicine and Public Health.*

B.S., Oklahoma, 1914; Health Officer, Durham City and County, 1922; 1930—

CYRUS CONRAD ERICKSON, B.S., B.M., M.D., *Instructor in Pathology.*

B.S., B.M., and M.D., Minnesota, 1932 and 1933; Int. in Surg., Minneapolis Gen'l. Hosp., May-Dec., 1932; Int., rotat., Detroit Receiving Hosp., Jan.-Aug., 1933; Fellow in Med., Minneapolis, Gen'l. Hosp., Sept., 1933-Jan., 1934; Clin. Res. Fellow in Ped., Minnesota, Jan., 1934-July, 1935; Ass't. Res., Strong Mem. Hosp., and Ass't. in Path., Rochester Med. Sch., 1935-1937; *Assistant Pathologist, Duke Hospital, 1937—*

JOHN WENDELL EVERETT, A.B., Ph.D., *Assistant Professor of Anatomy.*

A.B., Olivet, 1928; Ph.D., Yale, 1932; Instr. in Biol., Goucher, 1930-1931; Instr. and Assoc. in Anat., Duke U. Sch. of Med., 1932-1939; 1932—

WILLIAM DEMPSEY FARMER, A.B., M.D., *Instructor in Otolaryngology and Ophthalmology.*

A.B. and M.D., Duke, 1930 and 1934; Int. in Med., Baltimore City Hospitals, 1934-1935; Int. in Surg. and Int., Ass't. Res., and Res. in Otolaryngology and Ophthalmology, 1935-1939; *Assistant Otolaryngologist and Ophthalmologist, Duke Hospital, 1939—*

GEORGE BURTON FERGUSON, M.Sc. (Med.), M.D., *Instructor in Bronchoscopy.*

M.D., Jefferson, 1932; M.Sc. (Med.), Pennsylvania, 1936; Resident Physician, Jefferson Med. Coll. Hosp., 1932-1934; *Bronchoscopist, Duke Hospital, 1937—*

HAROLD FINKELSTEIN, B.S., M.D., *Assistant Professor of Surgery.*

B.S., Yale, 1924; M.D., Johns Hopkins, 1928; Int. and Ass't. Res. in Surg., Johns Hopkins Hosp., 1928-1929 and 1930-1931; Fellow in Surg., Johns Hopkins Med. Sch., 1929-1930; Ass't., Instr., and Assoc. in Anat. and Surg., Duke Med. Sch., 1931-1937; Ass't. Res. and Res. in Surg., and *Assistant Surgeon, Duke Hospital, 1931—*

RICHARD VAN FLETCHER, B.S., M.D., *Instructor in Surgery.*

B.S., Georgia, 1929; M.D., Johns Hopkins, 1933; Int. and Assistant Resident in Surgery, Duke Hospital, 1933-1935; on leave of absence, 1935-1936, Trudeau Sanatorium, Saranac Lake, N. Y.; Int., Ass't. Res. and *Resident in Surgery, Duke Hospital, 1933—*

WILEY DAVIS FORBUS, A.B., M.D., *Professor of Pathology.*

A.B., Washington and Lee, 1916; M.D., Johns Hopkins, 1923; Res. and Assoc. Pathologist, Johns Hopkins Hosp., 1926-1927 and 1929-1930; Guest Ass't., Pathol. Inst., Ludwig Maximilian's Univ., Munich, 1928; Pathol., Baltimore City Hospitals; Consulting Pathologist, Frederick City Hosp., 1925-1930; Ass't., Instr. and Assoc. in Path., Johns Hopkins Med. Sch., 1923-1930; *Pathologist, Duke Hospital, 1929—*

- MILO FRITZ, A.B., M.D., *Instructor in Otolaryngology and Ophthalmology*. A.B. and M.D., Columbia, 1931 and 1934; Int., rotat., Brooklyn Hosp., 1934-1936; Int. in Surg., and Int., Ass't. Res. and Resident in Otolaryngology and Ophthalmology, Duke Hospital, 1936—
- ROBERT CARSON FUGATE, M.D., *Assistant in Otolaryngology and Ophthalmology*. M.D., Duke, 1937; Int. in Ped., Duke Hosp., April, 1937; Int., Manhattan Eye, Ear & Throat Hosp., June, 1937; rotat., Harper Hosp., Detroit, 1937-1938; Int. and Assistant Resident in Otolaryngology and Ophthalmology, Duke Hospital, 1938—
- CLARENCE ELLSWORTH GARDNER, JR., A.B., M.D., *Associate Professor of Surgery*. A.B., Wittenberg, 1924; M.D., Johns Hopkins, 1928; Int. and Ass't. Res., Johns Hopkins Hosp., 1928-1930; Ass't. in Surg., Johns Hopkins Med. Sch., 1929-1930; Instr. and Ass't. Professor, Duke Med. Sch., 1930-1935; Resident in Surgery and Associate Surgeon, Duke Hospital, 1930—
- PERRY GIBSON, A.B., B.S., M.S., *Instructor in Medical Social Service*. A.B., Radcliffe, 1935; B.S. and M.S., Simmons, 1936 and 1937; 1937—
- ELIZA DOROTHY GOODMAN, R.N., Anes., *Assistant in Anesthesia*. Diploma, Mary Washington Hosp. Sch. of Nursing, Fredericksburg, Va., 1927; Certificate in Anesthesia, Duke Hosp., 1933; Anesthetist, Southside Community Hosp., Farmville, Va., 1933-1934; Anesthetist, Duke Hospital, 1934—
- HAROLD BENEDICT GOTAAS, B.S., M.S., S.M., *Instructor in Public Health*. B.S. in C.E., Univ. of North Dakota, 1928; M.S. in C.E., Iowa, 1930; S.M., Harvard, 1937; Assistant Professor Sanitary Science, Univ. of North Carolina; 1938—
- WILLIAM ALEXANDER GRAHAM, A.B., M.D., *Instructor in Obstetrics and Gynecology*. A.B., Univ. of North Carolina, 1928; M.D., Pennsylvania, 1932; Int., rotat., Union Memorial Hosp., 1932-1933; Int., Obs. and Gyn., Royal Victoria Hosp., 1933-1934; Int., Women's Hosp., N. Y., 1934-1937; Assistant Obstetrician and Gynecologist, Duke Hospital, 1939—
- ROBERT WILLIAMS GRAVES, B.S., M.A., M.D., *Associate in Neurology*. B.S., Davidson, 1926; M.A., Princeton, 1928; M.D., Duke, 1933; Voluntary Ass't., Montreal Neurological Institute, June-Dec., 1933; Int. and Ass't., Res. in Med., New Haven Hosp., 1934-Jan., 1936; Voluntary Ass't., Nat'l. Hosp., Queen Square, London, and Instituto del Cancer, Madrid, Jan.-July, 1936; Instr. in Anat., Duke Med. Sch., 1936-1937; Assistant Physician, Duke Hospital, 1937—
- JUNE U. GUNTER, A.B., M.D., *Instructor in Pathology*. A.B., North Carolina, 1931; M.D., Jefferson, 1936; Int., rotat., Cooper Hosp., Camden, N. J., 1936-1937; Res. in Path., Pennsylvania Hosp., 1937-1938; Ass't. Res. and Resident in Pathology, Duke Hospital, 1938—
- SNOWDEN COWMAN HALL, A.B., M.D., *Instructor in Medicine*. A.B., William and Mary, 1923; M.D., Harvard, 1930; Ass't. Res. in Med., and Fellow, Private Diagnostic Clinic, Duke Hospital, 1932-1935; 1937—
- EDWIN CROWELL HAMBLEN, B.S., M.D., *Associate Professor of Obstetrics and Gynecology*. B.S. and M.D., Virginia, 1921 and 1928; Ass't. Instr. in Pharmacol., and Materia Medica, Baylor Med. Coll., 1922-1926; Int. and Res. in Obs. and Gyn., Univ. Va. Hosp., 1928-1930; Clinical Instr. in Obs. and Gyn., Univ. Med. Dept., 1930-1931; Associate Obstetrician and Gynecologist, and Endocrinologist, Duke Hospital, 1931—
- ALMA SMITH HAMM, R.N., Anes., *Assistant in Anesthesia*. Diploma, Maria Parham Hosp. Sch. of Nursing, Henderson, N. C., 1930; Certificate in Anesthesia, Duke Hosp., 1937; Anesthetist, Duke Hospital, 1937—
- PHILIP HANDLER, B.S., M.S., Ph.D., *Associate in Physiology and Nutrition*. B.S., Coll. of City of New York, 1936; M.S. and Ph.D., Illinois, 1937 and 1939; 1939—

FREDERIC MOIR HANES, A.B., A.M., M.D., *Florence McAlister Professor of Medicine.*

A.B., Univ. of North Carolina, 1903; A.M., Harvard, 1904; M.D., Johns Hopkins, 1908; Int., Johns Hopkins Hosp., 1908-1909; Assoc. Prof. of Path., Columbia Univ., and Pathologist, Presbyterian Hosp., N. Y., 1909-1912; Assoc., Rockefeller Institute, 1912-1913; Assoc. Prof. of Medicine, Washington Univ. Med. Dept., 1913-1914; Ass't. in Neurology, Queen Square Hospital, London, 1914; Prof. of Therapeutics, Med. Coll. of Va., 1914-1916; Lt. Col. Commanding Base Hosp. 65, A. E. F., 1917-1918; *Physician, Duke Hospital, 1931—*

OSCAR CARL EDVARD HANSEN-PRÜSS, A.B., M.D., *Associate Professor of Medicine.*

A.B., Universidad Mayor de San Marcos, 1919; Voluntary Ass't. in Path., Friedrich Wilhelm Universität, Berlin, 1920-1921; M.D., Johns Hopkins, 1924; Int., Ass't. Res. in Med., and Ass't. Physician, Johns Hopkins Hosp., 1924-1930; Ass't., Instr., and Assoc. in Medicine, Johns Hopkins Med. Sch., 1925-1930; Assistant and Associate *Physician, Duke Hospital, 1930—*

GEORGE THOMAS HARRELL, JR., B.A., M.D., *Assistant in Medicine.*

B.A. and M.D., Duke, 1932 and 1936; Int. in Med. and in Pathology, Duke Hospital, 1936-1937; Pathologist, City Memorial Hospital, Winston-Salem, N. C., Dec., 1937-July, 1938; *Assistant Resident in Medicine, Duke Hospital, 1938—*

JEROME SYLVAN HARRIS, A.B., M.D., *Associate in Pediatrics and Biochemistry.*

A.B., Dartmouth, 1929; M.D., Harvard, 1933; Med. House Officer, House of Good Samaritan, Boston, Oct., 1933-Jan., 1934; Int. in Med., Univ. of Chicago Clinics, 1934-1935; Int., Infants' and Children's Hosp., Boston, 1935-1936; Ass't. Res. and Assistant *Pediatrist, Duke Hospital, 1936—*

DERYL HART, A.B., A.M., M.D., *Professor of Surgery.*

A.B. and A.M., Emory, 1916 and 1917; M.D., Johns Hopkins, 1921; Int. in Surg., Ass't. Res. in Surg. Path., Ass't. Res., Res., and Assoc. Surgeon, Johns Hopkins Hosp., 1921-1930; Ass't. in Path., Instr., and Assoc. in Surg., Johns Hopkins Med. Sch., 1922-1929; *Surgeon, Duke Hospital, 1929—*

HAROLD IRA HARVEY, A.B., M.D., *Assistant in Medicine.*

A.B., Harvard, 1924; M.D., Duke, 1937; Int. and Ass't. Res. in Med., and Assistant *Resident in Medical Private Diagnostic Clinic, Duke Hospital, 1937—*

JAMES PAISLEY HENDRIX, B.S., M.A., M.D., *Associate in Medicine.*

B.S., Davidson College, 1925; M.A., Davidson, 1926; M.D., Univ. of Penn., 1930; Int., Hosp. of Univ. of Penn., 1930-1932; Research Fellow in Pharmacology, Univ. of Penn., 1932-1935; Instr. in Pharmacology, 1935-1938; Part-time staff Physician, Medical and Gastro-Intestinal Clinics, University Hospital, 1935-1938; *Assistant Physician, Duke Hospital, 1938—*

DUNCAN CHARTERIS HETHERINGTON, A.B., M.A., Ph.D., M.D., *Associate Professor of Anatomy.*

A.B., Colorado College, 1919; M.A. and Ph.D., Illinois, 1920 and 1922; M.D., Johns Hopkins, 1926; Instr. in Anat., Vanderbilt Med. Sch., 1926-1930; *1930—*

JOSEPH M. HITCH, A.B., M.S., M.D., *Instructor in Dermatology and Syphilology.*

A.B., Delaware, 1929; M.D. and M.S., Virginia, 1933 and 1938; Int. in Derm. and Syphil., Univ. of Va. Hosp., April, 1933-July, 1934; Int., rotat., and in Med. and Surg., Univ. of Okla. Hosp., 1934-1935; Ass't. Res. in Derm. and Syphil., Cleveland City Hosp., 1935-1936; Res. Derm. and Syphil., University of Va. Hosp., 1936-1937; Instr. and Service Fellow in Derm. and Syphil., Univ. of Va. Hosp., 1937-1938; *1938—*

WILLIAM HENRY HOLLINSHEAD, B.A., M.S., Ph.D., *Assistant Professor of Anatomy.*

B.A., M.S., and Ph.D., Vanderbilt, 1926, 1927, and 1932; Instr. in Biol., Vanderbilt, 1927-1930; Instr. and Assoc. in Anat., Duke Med. Sch., 1930-1935; *1930—*

WILLIAM FREDWIN HOLLISTER, M.D., *Assistant in Surgery.*

M.D., Duke, 1938; Int. and Assistant *Resident in Surgery, Duke Hospital, 1938—*

JOSEPH DAVID HOUGH, B.A., M.D., *Assistant in Medicine.*

B.A., Shepherd College, 1931; M.D., Munich, 1937; Int., N. C. St. Sanatorium, Nov., 1937-Mar., 1938; Int. and Assistant *Resident in Medicine, Duke Hospital, 1938—*

FLOYD KINZER HURT, M.D., *Instructor in Roentgenology.*

M.D., Virginia, 1935; Int., rotat., Duval Co. Hosp., Jacksonville, Fla., 1935-1937; Ass't. Instr. in Path., Va. Med. Sch., 1937-1938; Ass't. Res. and *Resident in Roentgenology, Duke Hospital, 1938—*

CHRISTOPHER JOHNSTON, A.B., M.D., *Assistant Professor of Medicine and Physiology.*

A.B. and M.D., Johns Hopkins, 1922 and 1926; Int. and Ass't. Res. in Med., Johns Hopkins Hosp., 1926-1928; Ass't. in Med., Johns Hopkins Med. Sch., 1927-1928; Ass't. Res. Physician, Hosp. of Rockefeller Institute, N. Y., 1928-1930; *Assistant Physician, Duke Hospital, 1930—*

ARTHUR HARVEY JOISTAD, JR., A.B., B.S., M.D., *Assistant in Medicine.*

A.B. and B.S., North Dakota, 1933 and 1935; M.D., Duke, 1937; Int. in Ped., Strong Mem. Hosp., Jan.-July, 1938; Int. and *Assistant Resident in Medicine, Duke Hospital, 1938—*

ROBERT RANDOLPH JONES, JR., A.B., M.D., *Assistant Professor of Surgery.*

A.B., Davidson, 1924; M.D., Johns Hopkins, 1928; Int. in Med., Strong Mem. Hosp., 1928-1929; Int. in Surg., Johns Hopkins Hosp., 1929-1930; Ass't. and Instr., Duke Med. Sch., 1930-1933; Ass't. Res. and Res. in Surgery, and *Assistant Surgeon, Duke Hospital, 1930—*

THOMAS T. JONES, A.B., M.D., *Instructor in Medicine.*

A.B., Davidson, 1928; M.D., Johns Hopkins, 1932; 1937—

MALCOLM D. KEMP, M.D., *Instructor in Psychiatry.*

M.D., Washington, 1930; Int., rotat., Grasslands Hosp., Valhalla, N. Y., 1930-1931; Ass't. Phys., Spring Grove State Hosp., Cantonsville, Md., 1931-1935; Assoc. in Psychiatry, Phipps Clinic, Johns Hopkins Hosp., 1935-1936; Medical Director, The Pinebluff Sanitarium, Pinebluff, N. C., 1936; 1937—

WALTER KEMPNER, M.D., *Associate in Medicine.*

M.D., Heidelberg, 1927; Research Assoc. and Ass't. to Prof. O. Warburg, Kaiser Wilhelm Institut f. Zellphysiologie, Berlin-Dahlem, 1927-1928 and 1933-1934; Ass't. to Prof. von Bergmann, Med. Clinic, Univ. of Berlin, 1929-1933; *Assistant Physician, Duke Hospital, 1934—*

JAMES RAYMOND KLEIN, A.B., Ph.D., *Instructor in Biochemistry.*

A.B. and Ph.D., Duke, 1934 and 1939; 1930—

HENRY IRVING KOHN, A.B., Ph.D., *Instructor in Physiology and Pharmacology.*

A.B., Dartmouth, 1930; Ph.D., Harvard, 1935; Fellow of the Gen'l. Educ. Bd., Stockholm and Cambridge, 1935-1937; 1937—

GEORGE M. LEIBY, M.P.H., Dr. P.H., M.D., *Instructor in Syphilology.*

M.D., Vanderbilt, 1931; M.P.H., Harvard, 1935; Dr. P.H., Johns Hopkins, 1938; Int., Protestant Hospital, Nashville, 1929-1930, Roper Hospital, Charleston, S. C., 1931-1932, and Vanderbilt Univ. Hospital, Nashville, 1932-1933; 1938—

DAVID WASHINGTON LESTER, M.D., *Instructor in Neuropsychiatry.*

M.D., Duke, 1935; Int., rotat. and Res. in Med., San Diego Co. Gen'l. Hosp., 1935-1937; Res. in Neuropsychiatry, Compton Sanitarium, Compton, Calif., 1937-1938; *Resident in Neuropsychiatry, Duke Hospital, 1939—*

EDWARD DAVID LEVY, A.B., *Assistant in Biochemistry.*

A.B., Harvard, 1935; 1938—

ARTHUR HILL LONDON, JR., B.S., M.D., *Instructor in Pediatrics.*

B.S., North Carolina, 1925; M.D., Pennsylvania, 1927; Int., rotat., Methodist Episcopal Hosp., Phila., 1927-1928; Ass't. Res. in Ped., Children's Hosp., Cincinnati, 1928-1929; Chief Res., Children's Hosp., Phila., and Instr. in Ped., Pennsylvania Med. Sch., 1929-1930; 1932—

DURWARD LEE LOVELL, M.D., *Assistant in Surgery.*

M.D., Duke, 1936; Int. and *Assistant Resident in Surgery, Duke Hospital, 1937—*

ANGUS McBRYDE, B.S., M.D., *Assistant Professor of Pediatrics.*

B.S., Davidson, 1924; M.D., Pennsylvania, 1928; Int. and Res. in Ped., Univ. of Pennsylvania Hosp., 1928-1930; Ass't. Res. in Ped., Johns Hopkins Hosp. and Ass't. in Ped., Johns Hopkins Med. Sch., 1930-1931; *Assistant Pediatricist, Duke Hospital, 1931—*

PAUL PRESSLY McCAIN, A.B., M.D., *Assistant Professor of Medicine.*

A.B., Erskine, 1907; M.D., Maryland, 1911; Int., Bay View Hosp., Baltimore, 1911-1912; Res., Gaylord Farm Sanat., Wallingford, Conn., 1912-1914; Chief of Med. Service, 1914-1924; and Sup't. North Carolina Tubercul. Sanat., 1924; 1931—

FORREST DRAPER McCREA, B.S., M.S., Ph.D., *Associate Professor of Physiology and Pharmacology.*

B.S., Purdue, 1918; M.S., Illinois, 1923; Ph.D., Wisconsin, 1927; Instr. in Physiol., Univ. Illinois, 1920-1923; Instr. in Physiol., Univ. of Wisconsin Med. Sch., 1923-1927; Ass't. Prof. of Physiol. and Pharmacol., Univ. of Georgia Sch. of Med., 1927-1929; Sr. Instr. in Physiol., Western Reserve Univ. Sch. of Med., 1929-1930; 1930—

ISAAC HALL MANNING, JR., A.B., M.D., *Instructor in Medicine.*

A.B., North Carolina, 1931; M.D., Harvard, 1935; Int. in Med., Boston City Hosp. 1936-1937; Ass't. Res. in Med., Ass't. in Path., and Res. in Med., Duke Hospital 1937-1939; 1939—

DAVID WILLIAM MARTIN, B.S., M.D., *Instructor in Pediatrics.*

B.S. in Med. and M.D., Duke 1937; Int. in Med., Baltimore City Hosps., 1937-1938; Int., Ass't. Res. and *Resident in Pediatrics, Duke Hospital, 1938—*

DONALD STOVER MARTIN, A.B., M.D., *Associate Professor of Bacteriology and Associate in Medicine.*

A.B., Johns Hopkins, 1925; M.D., Rochester, 1930; Int. in Ped., Strong Mem. Hosp., 1930-1931; Ass't. in Physiol. and Ass't. in Bact., Rochester Med. Sch., 1926-1927 and 1931-1932; *Associate Bacteriologist, Duke Hospital, 1932—*

ELSIE W. MARTIN, A.B., M.S., *Professor of Dietetics.*

A.B., Whitman, 1913; M.S., Teachers Coll., Columbia, 1927; Prof. of Home Economics, Puget Sound, 1915-1917; Dietitian, Univ. of Iowa Hosp., 1919-1920, and Charles T. Miller Hosp., St. Paul, Minn., 1920-1926; Admin. Dietitian, Lakeside Hosp., Cleveland, 1929-1930; *Chief Dietitian, Duke Hospital, 1929—*

JASPER EUGENE MORGAN, B.S., A.M., Ph.D., *Instructor in Roentgenology and Physiology.*

B.S., Wake Forest, 1931; A.M. and Ph.D., Duke, 1932 and 1936; Research Ass't. and Research Assoc. in Physics, Duke Univ., 1931-1936; *Consulting Physicist, Duke Hospital, 1936—*

VINCE MOSELEY, A.B., M.D., *Fellow in Dermatology and Syphilology.*

A.B. and M.D., Duke, 1933 and 1936; Int. and Ass't. Res. in Med., Duke Hosp., 1937-1939; 1939—

MARY HOEN MULLER, R.N., Anes., *Instructor in Anesthesia.*

Diploma, Johns Hopkins Hosp. Sch. of Nursing, 1925; Certificate in Anesthesia, Johns Hopkins Hosp., 1926; Anesthetist, *ibid.*, 1926-1930; *Anesthetist, Duke Hospital, 1930—*

HENRY STOKES MUNROE, JR., B.S., M.D., *Assistant in Anatomy.*

B.S., Davidson, 1931; M.D., Duke, 1935; Int. in Med., 1935-1936, and Int. and Ass't. Res. in Surg., Duke Hospital, 1936-1938; Fellow in Surg., Lahey Clinic, Boston, Mass., 1938-1939; 1939—

BRODIE CRUMP NALLE, JR., B.A., M.D., *Voluntary Assistant in Pathology.*

B.A., North Carolina, 1934; M.D., Duke, 1939; 1939—

HANS NEURATH, Ph.D., *Assistant Professor of Biochemistry.*

Ph.D., Vienna, 1933; Instr. in Colloid Chem., Univ. of Vienna, 1933-1934; Research Fellow, Univ. of London, 1934-1935; Research Fellow in Biochem., Univ. of Minn., 1935-1936; Instr. in Chem., Cornell Univ., 1936-1938; Research Assoc. in Biochem. Duke Med. Sch., 1938-1939; 1938—

WILLIAM McNEAL NICHOLSON, A.B., M.D., *Associate in Medicine and Biochemistry.*

A.B., Duke, 1927; M.D., Johns Hopkins, 1931; Res. House Officer in Med., Johns Hopkins Hosp., 1931-1932; Ass't. in Path. and in Med., Johns Hopkins Med. Sch., 1932-1935; *Assistant Physician, Duke Hospital, 1935—*

GRIZZELLE M. NORFLEET, A.B., B.S., M.A., *Supervisor of the Spastic Clinic.*

A.B., Salem, 1920; B.S. and M.A., Columbia, 1923 and 1928; 1938—

J. W. ROY NORTON, A.B., M.P.H., M.D., *Lecturer in Preventive Medicine and Public Health.*

A.B., Duke, 1920; M.D., Vanderbilt, 1928; M.P.H., Harvard, 1936; Prof. of Public Health Administration, Univ. of North Carolina; 1938—

EDWARD STEWART ORGAIN, M.D., *Associate in Medicine.*

M.D., Virginia, 1930; Int., Ass't. Res. and Res. in Med., Univ. Hospital of Cleveland, 1930-1933; Res. Fellow in Med., assigned to Cardiology, Mass. General Hosp., 1933-1934; *Assistant Physician, Duke Hospital, 1934—*

PHILIP BROWER PARSONS, B.S., M.D., *Instructor in Radiology.*

B.S. and M.D., Duke, 1935 and 1936; Int. in Surg., and in Patb., and *Resident in Radiology, Duke Hospital, 1936—*

CHAUNCEY JOHNSON PATTEE, B.A., M.S., M.D.C.M., *Research Fellow in Endocrinology.*

B.A., Bishops, 1931; M.D.C.M. and M.S., McGill, 1936 and 1938; Int., Royal Victoria Hospital, Montreal, Ca., 1936-1938; 1939—

ARTHUR SPERRY PEARSE, B.S., A.M., Ph.D., *Professor of Zoology.*

B.S. and A.M., Nebraska, 1900 and 1904; Ph.D., Harvard, 1908; Austin Teaching Fellow, Harvard, 1907-1908; London School of Hygiene and Tropical Medicine, 1926; Instr. in Zoology, Michigan, 1908-1910; Ass't. Prof. 1910-1911; Assoc. Prof., Philippines, 1911; St. Louis, 1911; Wisconsin, 1911-1912; Assoc. Prof., 1912-1919; Prof., 1919-1927; Prof., Keiogijuku Digaku, Tokyo, 1929-1930; 1930—

RICHARD LEHMER PEARSE, A.B., M.D., *Instructor in Obstetrics and Gynecology.*

A.B., Duke, 1927; M.D., Harvard, 1931; Int., Free Hosp. for Women, 1931-1932; Int., Mass. Gen'l. Hosp., 1932-1934; Int., Providence Lying-In Hosp., 1934-1935; Ass't. Res. and Res. in Obstetrics and Gynecology, and *Assistant Obstetrician and Gynecologist, Duke Hospital, 1935—*

TALMAGE LEE PEELE, M.D., *Instructor in Anatomy.*

M.D., Duke, 1934; Int. and Ass't. Res. in Med., Duke Hosp., 1934-1936; Int. and Res. in Neurol., Bellevue Hosp., 1936-1937; Ass't. in Anat., Johns Hopkins Med. Sch., 1937-1938; Instr. in Anat., Rochester Med. Sch., 1938-1939; 1939—

WILLIAM ALEXANDRE PERLZWEIG, B.S., A.M., Ph.D., *Professor of Biochemistry.*

B.S., A.M., and Ph.D., Columbia, 1913, 1914, and 1915; Ass't. in Physiol. Chem., Columbia Med. Sch., 1913-1916; Research Chemist, Rockefeller Institute, 1916-1917; Research Biochemist, Hygienic Laboratory, U. S. P. H. S., 1919-1921; Instr. and Assoc. in Med., Johns Hopkins Med. Sch., 1922-1930; Chemist to the Med. Clin., Johns Hopkins Hosp., 1922-1930; *Biochemist, Duke Hospital, 1929—*

ELBERT LAPSLEY PERSONS, A.B., M.D., *Associate in Medicine and Dermatology.*

A.B., Ohio State, 1923; M.D., Harvard, 1927; House Officer, Huntington Mem. Hosp., Boston, 1925-1926; Int. and Res. in Med., Massachusetts General Hosp., 1927-1930; Teaching Fellow in Med., Harvard Med. Sch., 1929-1930; Instr. in Med., Duke Med. Sch., 1930-1934; Res. in Med. and *Assistant Physician, Duke Hospital, 1930—*

WILLIAM HENRY PETTUS, JR., B.S., M.D., *Assistant in Surgery.*

B.S., Richmond, 1933; M.D., Cornell, 1937; Int. and *Assistant Resident in Surgery, Duke Hospital, 1937—*

ELMA O. PHILLIPSON, A.B., M.A., *Assistant in Medical Social Service.*

A.B., Berea, 1930; M.A., Chicago, 1938; Med. Social Worker, Univ. of Chicago Clinics, Jan.-Aug., 1938; 1938—

MARGARET ISABEL PINKERTON, B.S., R.N., *Dean of the School of Nursing and Professor of Nursing.*

R.N., Univ. of Va. School of Nursing, 1927; B.S. in Nursing Education, Teachers Coll., Columbia Univ., 1936; Ass't. Supt. of Nurses, Stuart Circle Hosp., 1928-1930; Hostess and Ass't. Supt. of Nurses, Univ. of Va. Hosp., 1930-1935; Instr. in Nursing Arts, Washington Univ. School of Nursing, 1936-1938; Supt. of Nurses, Barnes Hosp., 1938-1939; *Superintendent of Nurses, Duke Hospital, 1939—*

DAVID EDWIN PLUMMER, M.D., *Instructor in Syphilology.*

M.D., Virginia Med. Coll., 1934; Ass't. in practice, Denton, N. C., 1934-1935; Ass't. in Research, Fitzsimmons Gen'l. Hosp., Denver, Colo., 1935-1937; Pub. Health Work, Lumberton, N. C., 1937-1938; 1938—

MARY ALVERTA POSTON, A.M., *Instructor in Bacteriology.*

A.M., Duke, 1939; Ass't. in Biol. Lab., Johns Hopkins Hosp., 1922-1930; *Assistant Bacteriologist, Duke Hospital, 1930—*

RICHARD BEVERLY RANEY, A.B., M.D., *Associate in Orthopaedics.*

A.B., North Carolina, 1926; M.D., Harvard, 1930; Int. in Surg., 1930-1931; Surg. Pathologist, 1931-1932; Ass't. Res. and Assoc. Res. Surgeon, Strong Mem. Hosp., 1932-1934; Res. in Orth. and *Assistant Orthopaedist, Duke Hospital, 1934—*

WATSON SMITH RANKIN, M.D., *Lecturer in Preventive Medicine and Public Health.*

M.D., Maryland, 1901; Int. and Res. in Path., Univ. of Maryland Hospital, 1901-1903; Dean and Prof. of Path., Wake Forest Coll., 1903-1909; Sec'y., State Board of Health and State Health Officer, North Carolina, 1909-1925; Director of Hosp. and Orphan Section, The Duke Endowment, 1925; 1930—

RUSSELL BEVERLEY RAY, B.A., M.D., *Assistant in Surgery and Anatomy.*

B.A. and M.D., Vanderbilt, 1935 and 1938; Int., 1938-1939, and *Assistant Resident in Surgery, Duke Hospital, and Assistant in Anatomy, 1939—*

I. THOMAS REAMER, Ph.G., *Instructor in Pharmacy.*

Ph.G., Univ. of Maryland, 1924; Ass't. Pharmacist, Johns Hopkins Hosp., 1925-1931; Pharmacist, *Duke Hospital, 1931—*

ROBERT JAMES REEVES, A.B., M.D., *Associate Professor of Radiology.*

A.B. and M.D., Baylor, 1920 and 1924; Int., Baylor Hosp., 1924-1925; Res. in Roentgenol., Massachusetts General Hosp., 1925-1926; Ass't. Attending Physician in Roentgen Ray Dept., Presbyterian Hosp. and Med. Center, N. Y., 1926-1930; Instr. in Med., Columbia Med. Sch., 1925-1930; *Radiologist, Duke Hospital, 1930—*

WILLIAM P. RICHARDSON, B.S., M.P.H., M.D., *Instructor in Preventive Medicine and Public Health.*

B.S. (Med.), Wake Forest, 1926; M.D., Med. Coll. of Va., 1928; M.P.H., Johns Hopkins, 1933; District Health Officer for Orange-Person-Chatham District Health Department; 1938—

LOUIS CARROLL ROBERTS, B.S., M.D., *Instructor in Urology.*

B.S., Davidson, 1930; M.D., Duke, 1933; Int. in Surg., Ass't. Res. in Path., Ass't. Res. in Surg., and *Resident in Urology, Duke Hospital, 1933—*

MILTON JOSEPH ROSENAU, M.D., *Lecturer in Preventive Medicine and Public Health.*

M.D., Pennsylvania, 1889; Student, Hygienisches Institut, Berlin, 1892-1893; L'Institut Pasteur, Paris, 1900; Pathologisches Institut, Vienna, 1900; Hon. A.M., Harvard; Professor of Epidemiology and Director of the Division of Public Health, Univ. of North Carolina; 1938—

LAURA EUGENIA ROSS, A.B., M.D., *Assistant in Pediatrics.*

A.B., Univ. of North Carolina, 1934; M.D., Pennsylvania, 1938; Int. and *Assistant Resident in Pediatrics, 1938—*

NORMAN F. ROSS, D.D.S., *Instructor in Dentistry.*

D.D.S., Temple, 1937; Int. in Dentistry, and *Assistant Dentist, Duke Hospital, 1937—*

ROBERT ALEXANDER ROSS, B.S., M.D., *Associate Professor of Obstetrics and Gynecology.*

B.S., Univ. of North Carolina, 1920; M.D., Pennsylvania, 1922; Res. Physician, Univ. of Pa. Settlement House, 1921-1922; Int., Episcopal Hosp., Phila., 1922-1924; Int. and Res., Kensington Hosp. for Women, 1923-1925; Obstetrician, Watts Hospital; Obstetrician, Salvation Army Hospital; Consulting Obstetrician and Gynecologist, Lincoln Hospital; *Associate Obstetrician and Gynecologist, Duke Hospital, 1930—*

EDWIN MacRAE RUCKER, A.B., M.D., *Instructor in Obstetrics and Gynecology.*

A.B., Randolph-Macon, 1927; M.D., Duke, 1934; Int. in Med., and Int., Ass't. Res. and *Resident in Obstetrics and Gynecology, Duke Hospital, 1934—*

JULIAN MEADE RUFFIN, A.B., M.A., M.D., *Associate Professor of Medicine.*

A.B., M.A., and M.D., Virginia, 1921, 1922, and 1926; Int. and House Officer, Bellevue Hosp., N. Y., 1926-1928; Instr. in Phys. Diag., George Washington Med. Sch., 1928-1930; Assistant and *Associate Physician, Duke Hospital, 1930—*

HERBERT PAUL SARETT, B.A., M.S., *Assistant in Biochemistry.*

B.A., Brooklyn, 1936; M.S., Cornell, 1937; 1939—

WILLIAM SCHULZE, B.S., M.D., *Instructor in Medicine.*

B.S., Richmond, 1932; M.D., Duke, 1936; Ass't. Res. in Med., Mass. Gen'l. Hosp., July, 1938-Sept., 1938; Int., Ass't. Res. and *Resident in Medicine, Duke Hospital, 1936—*

WILL CAMP SEALY, B.S., M.D., *Assistant in Surgery.*

B.S. and M.D., Emory, 1933 and 1936; Int. and *Assistant Resident in Surgery, Duke Hospital, 1936—*

*ALFRED RIVES SHANDS, JR., B.A., M.D., *Associate Professor of Surgery in Charge of Orthopaedics.*

B.A. and M.D., Virginia, 1918 and 1922; Int. in Med., Ass't. Res. in Surg., Int., Ass't. Res. and Res. in Ortho. Surg., Johns Hopkins Hosp., 1922-1927; Instr. in Ortho. Surg., Johns Hopkins Med. Sch., 1926-1927; Attending Orthopaedic Surgeon, four hospitals, Washington, D. C.; Instr. in Ortho., George Washington Univ. Med. Sch., 1927-1930; *Orthopaedist, Duke Hospital, 1930—*

D. GORDON SHARP, B.S., M.A., Ph.D., *Research Associate in Experimental Surgery.*

B.S., Rutgers, 1932; M.A. and Ph.D., Duke, 1937 and 1939; Research Physicist in X-ray and ultraviolet ray, Westinghouse Elec. & Mfg., Bloomfield, N. J., 1932-1936; Research Fellow in Physics, Duke Univ. and Fellow in Surgery, Duke Univ. School of Med., 1936-1939; 1939—

DAVID TILLERSON SMITH, A.B., M.D., *Professor of Bacteriology, and Associate Professor of Medicine.*

A.B., Furman, 1918; M.D., Johns Hopkins, 1922; Int. in Ped., Johns Hopkins Hosp., 1922-1923; Ass't. in Path. and Bact., Rockefeller Institute, 1923-1924; Bacteriologist, Pathologist and Director, Research Laboratory of N. Y. State Hosp. for Tubercul., Ray Brook, N. Y., 1924-1930; *Bacteriologist and Associate Physician, Duke Hospital, 1930—*

O. NORRIS SMITH, B.A., M.D., *Instructor in Medicine.*

B.A., Washington and Lee, 1929; M.D., Pennsylvania, 1933; Int., rotat., and Res. in Path., Pennsylvania Hosp., 1933-1937; Ass't. Instr. in Path., Pennsylvania Med. Sch., 1935-1937; Ass't. Physician, O. P. C., Pennsylvania Hosp., 1936-1937; Ass't. Res. in Med., Duke Hospital, 1937-1938; 1937—

PRESTON SMITH, *Assistant in Clinical Microscopy.*

Assistant in Clinical Microscopy, Duke Medical School; 1932—

SUSAN GOWER SMITH, A.B., M.A., *Associate in Medicine.*

A.B., Barnard, 1919; M.A., Columbia, 1924; Chemist, N. Y. State Hosp., 1926-1930; Instr. in Biochem.; Instr. in Phys. and Pharm.; Assoc. in Phys. and Nutrition, and Associate in Med. and Nutrition, 1930-1937; 1930—

MARY HELEN SNIVELY, R.N., Anes., *Instructor in Anesthesia.*

Diploma, Johns Hopkins Hosp. Sch. of Nursing, 1929; Certificate in Anesthesia, Johns Hopkins Hosp., 1930; *Anesthetist, Duke Hospital, 1930—*

* On leave, 1937—

JOSEPH ANDERSON SPEED, M.D., *Director of Student Health.*

M.D., Jefferson, 1914; Int., rotat., Phila. Polyclinic Hosp., 1914-1915; Int., Babies Hosp., Phila., June-Nov., 1915; in practice, Durham, 1915-17; Capt., Med. Corps, 113th Field Artillery, A. E. F., 1917-1919; in practice and College Phys. for Students, Trinity Coll., 1920-1930; 1930—

DOUGLAS HAMILTON SPRUNT, B.S., M.S., M.D., *Associate Professor of Pathology.*

B.S., Virginia, 1922; M.D. and M.S., Yale, 1927 and 1929; Acting Res. and Res. in Path., New Haven Hosp., 1927-1929; Instr. in Path., Yale Med. Sch., 1928-1929; Sterling Research Fellow, 1929-1930; Ass't. in Med., Hosp. of Rockefeller Institute, 1930-1932; *Associate Pathologist, Duke Hospital, 1932—*

JOSEPH BLACKBURN STEVENS, B.S., M.D., *Assistant in Neurology.*

B.S., Davidson, 1932; M.D., Duke, 1935; Int., Jr. Ass't., Ass't. Res. in Path.; Int. and Ass't. Res. in Med., and *Assistant Resident in Neurology, Duke Hospital, 1936—*

GEORGE MERRITT STROUD, B.S., M.D., *Assistant in Medicine.*

B.S. and M.D., Duke, 1936 and 1938; Int. and *Assistant Resident in Medicine, Duke Hospital, 1938—*

CHRISTOPHER STUART, JR., M.D., *Assistant in Urology.*

M.D., McGill, 1934; Int., rotat., and Res. in Path., Montreal Gen'l. Hosp., 1934-1936; Fellow in Private Diagnostic Clinic, Int. and Ass't. Res. in Surgery, and *Assistant Resident in Urology, Duke Hospital, 1936—*

FRANCIS HUNTINGTON SWETT, A.B., M.A., Ph.D., *Professor of Anatomy.*

A.B., Bates, 1916; M.A., Brown, 1917; Ph.D., Yale, 1922; Instr. and Assoc. in Anat., Johns Hopkins Med. Sch., 1922-1925; Assoc. Prof. of Anat., Vanderhilt Med. Sch., 1925-1930; 1929—

ALTON ROBERT TAYLOR, B.S., Ph.D., *Research Associate in Surgery.*

B.S., Wesleyan, 1930; Ph.D., Princeton, 1939; Research Ass't. and Research Assoc. in Biol., Princeton Univ., 1930-1939; 1939—

HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D., *Associate Professor of Biochemistry and Toxicology.*

B.S., M.S. and Ph.D., Univ. of North Carolina, 1920, 1921 and 1924; Instr. in Chem. and Pharmaceut. Chem., Univ. of North Carolina, 1920-1925; Research Chemist, E. R. Squibb & Sons, and Fisk Rubber Company, 1925-1928; Instr. in Ophthalmol., and Chemist to Wilmer Institute, Johns Hopkins Hosp., 1928-1930; Visiting Fellow in Forensic Med., New York Univ., 1934; *Associate Biochemist and Toxicologist, Duke Hospital, 1930—*

JOSEPH DIMMICK THETFORD, M.D., *Assistant in Medicine.*

M.D., Duke, 1938; Int. and *Assistant Resident in Medicine, Duke Hospital, 1939—*

JUNE B. THOMAS, A.B., M.D., *Assistant in Student Health.*

A.B., Goucher, 1929; M.D., Johns Hopkins, 1934; Acting Ass't. Surgeon, Pub. Health Serv., July, 1934-Dec., 1935, and Int., Babies Hosp., New York City, Jan., 1936-July, 1937; *Resident Physician, Woman's College, Duke University, 1937—*

WALTER LEE THOMAS, JR., A.B., M.A., M.D., *Assistant Professor of Obstetrics and Gynecology.*

A.B., Lynchburg, 1926; M.A. and M.D., Virginia, 1927 and 1931; Int., Virginia-Mason Hosp., 1931-1932; Ass't. Res. and Res. in Obs. and Gyn., Duke Hosp., 1932-1935; Assistant Obstetrician and Gynecologist, Henry Ford Hosp., 1936-1937; *Assistant Obstetrician and Gynecologist, Duke Hospital, 1937—*

SAMUEL EARLE UPCHURCH, B.A., M.D., *Instructor in Surgery.*

B.A. and M.D., Vanderhilt, 1929 and 1933; Int. in Surg., Int., and Ass't. Res. in Med., and Ass't. Res. and *Resident in Surgery, Duke Hospital, 1933—*

CONDIT BREWER VAN ARSDALL, JR., A.B., M.D., *Assistant in Medicine.*

A.B., Kentucky Wesleyan, 1936; M.D., Duke, 1937; Int. Gen'l. Hosp., Saranac Lake, N. Y., 1937-1938; Int. and *Assistant Resident in Medicine, Duke Hospital, 1938—*

- CLOTILDE SCHLAYER, M.D., *Research Assistant in Medicine*.
Ph.D., Heidelberg, 1927; Voluntary Research Ass't. in Cellular Physiol., University Hosp. of Berlin, 1933-1935; 1937—
- WILLIAM STUART WALLACE, A.B., M.D., *Instructor in Radiology*.
A.B. and M.D., Washington, 1931 and 1935; Int., rotat., George F. Geisinger Hosp., Danville, Pa., 1935-1936; Res. in X-ray, Hurley Hosp., Flint, Mich., 1936-1938; *Assistant Radiologist, Duke Hospital, 1938—*
- CHESTER H. WATERS, JR., B.A., M.D., *Instructor in Orthopaedics*.
B.A., Amherst, 1932; M.D., Nebraska, 1936; Ass't. in practice, Omaha, July-Nov., 1936; Int. in Med., Presbyterian Hosp., Chicago, 1936-1938; Res. Surgeon, N. C. Orth. Hosp., Gastonia, July, 1938-Jan., 1939; Exchange Service in Orthopaedics, Univ. of Va. Hosp., Charlottesville, Jan.-July, 1939; Ass't. Res. and *Resident in Orthopaedics, Duke Hospital, 1938—*
- NELSON MORTIMER WEBSTER, M.D., *Assistant in Obstetrics and Gynecology*.
M.D., Duke, 1937; Int. in Obstetrics, Baltimore City Hosp., Jan.-July, 1938; Int. and *Assistant Resident in Obstetrics and Gynecology, Duke Hospital, 1938—*
- WARNER LEE WELLS, M.D., *Assistant in Surgery*.
M.D., Duke, 1938; Int. and *Assistant Resident in Surgery, Duke Hospital, 1938—*
- JAMES GRIFFITH WHILDIN, B.S., M.D., *Research Fellow, Notional Cancer Institute, in Pathology*.
B.S. and M.D., Duke, 1937; Int., rotat., Reading City Hospital, 1937-1938; Int. in Surg., Duke Hospital, 1938-1939; 1939—
- PAUL M. WILLIAMS, M.D., *Assistant in Medicine*.
M.D., Oregon, 1937; Int., U. S. Marine Hosp., Balto., 1937-1938; Int. and *Assistant Resident in Medical Private Diagnostic Clinic, Duke Hospital, 1938—*
- NANCY BOWMAN WISE, A.B., M.D., *James A. Greene Research Fellow in Medicine and Bacteriology*.
A.B., Mt. Holyoke, 1932; M.D., Yale, 1937; Int. and Ass't. Res. in Med., and *Research Fellow in Medicine and Bacteriology, Duke Hospital, 1937—*
- WILLIAM REED WOOD, B.S., M.D., *Assistant in Student Health*.
B.S., Wake Forest, 1936; M.D., Louisville, 1938; Int., rotat., Saginaw General Hosp., 1938-1939; 1st Lieut., Med. Res. Corps, U. S. A., 1938; *Assistant Resident in Student Health, Duke Hospital, 1939—*
- BARNES WOODHALL, A.B., M.D., *Assistant Professor of Surgery in Charge of Neuro-surgery*.
A.B., Williams, 1926; M.D., Johns Hopkins, 1930; Int., Ass't. Res. and Res. in Surg., Johns Hopkins Hosp., 1930-1937; Ass't. and Instr. in Surg., Johns Hopkins Med. Sch., 1931-1937; *Assistant Surgeon, Duke Hospital, 1937—*
- ANNE YATES, A.B., A.M., Ph.D., *Assistant Professor of Biochemistry*.
A.B., Mount Holyoke, 1913; A.M. and Ph.D., Columbia, 1915 and 1920; Teach. Fellow in Chem., Barnard, 1913-1915; Instr. in Physiol., Mount Holyoke, 1915-1917; Teach. Fellow in Physiol., Minnesota Med. Sch., 1917-1918; Instr. in Physiol., Wellesley, 1919-1920; Assoc. in Biol., Bryn Mawr, 1920-1925; Ass't. Scientist, St. Elizabeth's Hosp., 1926-1933; *Assistant Biochemist, Duke Hospital, 1933—*
- KARL ARDEN YOUNGSTROM, A.B., M.A., Ph.D., *Instructor in Anatomy*.
A.B., M.A., and Ph.D., Kansas, 1930, 1932, and 1937; Instr. in Bact., 1930-1931, and in Anat., Kansas Univ., 1931-1937; 1937—

STAFF OF DUKE HOSPITAL

Administrative Committee

F. V. ALTVATER
BAYARD CARTER
W. C. DAVISON

DERYL HART
F. M. HANES
ELSIE W. MARTIN

MARGARET I. PINKERTON
F. R. PORTER
D. T. SMITH

Administrative and Technical Staff

F. VERNON ALTVATER, A.B., A.M., *Superintendent*.
F. ROSS PORTER, A.B., *Assistant Superintendent*.
HAROLD CHANDLER MICKEY, B.B.A., *Assistant Superintendent*.
MARGARET I. PINKERTON, B.S., R.N., *Dean of School of Nursing*.
ELSIE WILSON MARTIN, A.B., M.S., *Professor of Dietetics*.
JASPER EUGENE MORGAN, B.S., M.S., Ph.D., *Physicist*.
I. THOMAS REAMER, Ph.G., *Pharmacist*.
REBA NEW HOBGOOD, *Public Dispensary*.
JUDITH FARRAR, A.B., B.S., *Librarian*.
MARY HOEN MULLER, R.N., *Anesthetist*.
PERRY GIBSON, A.B., B.S., M.S., *Social Service*.
JESSIE HARNED, *Record Librarian*.
ELON HENRY CLARK, *Artist*.
HENRY FLOYD PICKETT, A.B., *Photographer*.
CHRISTIAN ADOLPH LETZING, *Braces and Instruments*.

Hospital and Public Dispensary Teaching Staff

Chiefs of Services

EDWIN PASCAL ALYEA, S.B., M.D., *Urology*.
WILLIAM BANKS ANDERSON, A.B., M.D., *Ophthalmology*.
BAYARD CARTER, A.B., B.A., M.A., M.D., *Obstetrics and Gynecology*.
RAYMOND S. CRISPELL, A.B., M.D., *Neuropsychiatry*.
WILBURT CORNELL DAVISON, A.B., B.A., B.Sc., M.A., D.Sc., M.D., *Pediatrics*.
WATT WEEMS EAGLE, A.B., M.D., *Otolaryngology*.
WILEY DAVIS FORBUS, A.B., M.D., *Pathology*.
FREDERIC MOIR HANES, A.B., A.M., M.D., *Medicine*.
DERYL HART, A.B., M.A., M.D., *Surgery*.
BARNES WOODHALL, A.B., M.D., *Neuro-surgery*.
GEORGE BURTON FERGUSON, M.S., M.D., *Bronchoscopy*.
THEODORE W. ATWOOD, A.B., D.M.D., *Dentistry*.
WILLIAM ALEXANDRE PERLZWEIG, B.S., A.M., Ph.D., *Biochemistry*.
ROBERT JAMES REEVES, A.B., M.D., *Röntgenology*.
DAVID TILLERSON SMITH, A.B., M.D., *Bacteriology*.

Associate Staff

JASPER LAMAR CALLAWAY, B.S., M.D., *Dermatology and Syphilology*.
NORMAN FRANCIS CONANT, B.S., A.M., Ph.D., *Mycology*.
ERLE BULLA CRAVEN, JR., A.B., M.D., *Medicine*.
MACDONALD DICK, A.B., M.A., M.D., *Medicine*.
SNOWDEN COWMAN HALL, A.B., M.D., *Medicine*.
OSCAR CARL EDVARD HANSEN-PRÜSS, A.B., M.D., *Medicine*.
JAMES PAISLEY HENDRIX, B.S., M.A., M.D., *Medicine*.
CHRISTOPHER JOHNSTON, A.B., M.D., *Medicine*.
ISAAC H. MANNING, JR., A.B., M.D., *Medicine*.
THOMAS T. JONES, A.B., M.D., *Medicine*.
WALTER KEMPNER, M.D., *Medicine*.

DONALD STOVER MARTIN, A.B., M.D., *Medicine and Bacteriology*.
 PAUL PRESSLY MCCAIN, A.B., M.D., *Medicine*.
 WILLIAM MCNEAL NICHOLSON, A.B., M.D., *Medicine*.
 EDWARD STEWART ORGAIN, M.D., *Medicine*.
 ELBERT LAPSLEY PERSONS, A.B., M.D., *Medicine and Dermatology*.
 JULIAN MEADE RUFFIN, A.B., M.A., M.D., *Medicine*.
 DAVID TILLERSON SMITH, A.B., M.D., *Medicine*.
 O. NORRIS SMITH, B.A., M.D., *Medicine*.
 ROBERT WILLIAMS GRAVES, B.S., M.A., M.D., *Neurology*.
 MALCOLM D. KEMP, M.D., *Psychiatry*.
 JOSEPH M. HITCH, A.B., M.S., M.D., *Dermatology and Syphilology*.
 GEORGE M. LEIBY, M.P.H., Dr. P.H., M.D., *Syphilology*.
 DAVID EDWIN PLUMMER, *Syphilology*.
 MARY ALVERTA POSTON, A.M., *Bacteriology*.
 JOSEPH W. BEARD, B.S., M.D., *Surgery*.
 HAROLD FINKELSTEIN, B.S., M.D., *Surgery*.
 CLARENCE ELLSWORTH GARDNER, JR., A.B., M.D., *Surgery*.
 ROBERT RANDOLPH JONES, JR., A.B., M.D., *Surgery*.
 LENOX DIAL BAKER, M.D., *Orthopaedics*.
 ROBERT BEVERLY RANEY, A.B., M.D., *Orthopaedics*.
 JOHN ESSARY DEES, B.S., M.D., *Urology*.
 WILLIAM D. FARMER, A.B., M.D., *Otolaryngology*.
 EDWIN CROWELL HAMLEN, B.S., M.D., *Obstetrics and Gynecology, and Endocrinology*.
 ROBERT ALEXANDER ROSS, B.S., M.D., *Obstetrics and Gynecology*.
 ANNIE THOMPSON SMITH, A.B., A.M., M.D., *Obstetrics and Gynecology*.
 WALTER LEE THOMAS, JR., A.B., M.A., M.D., *Obstetrics and Gynecology*.
 WILLIAM ALEXANDER GRAHAM, A.B., M.D., *Obstetrics and Gynecology*.
 RICHARD LEHMER PEARSE, A.B., M.D., *Obstetrics and Gynecology*.
 JAY MORRIS ARENA, B.S., M.D., *Pediatrics*.
 ANGUS MCBRYDE, B.S., M.D., *Pediatrics*.
 ARTHUR HILL LONDON, JR., A.B., M.D., *Pediatrics*.
 JEROME SYLVAN HARRIS, A.B., M.D., *Pediatrics*.
 SUSAN COONS DEES, A.B., M.S., M.D., *Pediatrics*.
 WILLIAM STUART WALLACE, A.B., M.D., *Radiology*.
 ROGER DENIO BAKER, A.B., M.D., *Pathology*.
 CYRUS CONRAD ERICKSON, B.S., B.M., M.D., *Pathology*.
 DOUGLAS HAMILTON SPRUNT, B.S., M.S., M.D., *Pathology*.
 HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D., *Toxicology*.
 ANNE YATES, A.B., A.M., Ph.D., *Biochemistry*.
 NORMAN F. ROSS, D.D.S., *Dentistry*.

Resident Staff

Residents

WILLIAM SCHULZE, B.S., Richmond, 1932; M.D., Duke, 1936; *Medicine*.
 RICHARD VAN FLETCHER, B.S., Georgia, 1929; M.D., Johns Hopkins, 1933; *Surgery*.
 SAMUEL EARLE UPCHURCH, B.A. and M.D., Vanderbilt, 1929 and 1933; *Surgery*.
 MILO FRITZ, A.B. and M.D., Columbia, 1931 and 1934; *Otolaryngology and Ophthalmology*.
 LOUIS CARROLL ROBERTS, A.B., Davidson, 1930; M.D., Duke, 1933; *Urology*.
 CHESTER H. WATERS, JR., B.A., Amherst, 1932; M.D., Nebraska, 1936; *Orthopaedics*.
 EDWIN MACRAE RUCKER, A.B., Randolph-Macon, 1927; M.D., Duke, 1934; *Obstetrics and Gynecology*.
 DAVID WILLIAM MARTIN, B.S. and M.D., Duke, 1937; *Pediatrics*.
 JUNE U. GUNTER, A.B., North Carolina, 1931; M.D., Jefferson, 1936; *Pathology*.

PHILIP BROWER PARSONS, B.S. and M.D., Duke, 1935 and 1936; *Radiology*.
 FLOYD KINZER HURT, M.D., Virginia, 1935; *Röntgenology*.
 DAVID WASHINGTON LESTER, M.D., Duke, 1935; *Neuropsychiatry*.

Assistant Residents

RICHARD RUTLEDGE CARTER, A.B., Oregon, 1935; M.D., Duke, 1938; *Medicine*.
 GEORGE THOMAS HARRELL, JR., B.A. and M.D., Duke, 1932 and 1936; *Medicine*.
 JOSEPH DAVID HOUGH, B.A., Shepherd, 1931; M.D., Munich, 1937; *Medicine*.
 ARTHUR HARVEY JOISTAD, JR., A.B. and B.S., North Dakota, 1933 and 1935; M.D., Duke, 1937; *Medicine*.
 GEORGE MERRITT STROUD, B.S. and M.D., Duke, 1936 and 1938; *Medicine*.
 JOSEPH DIMMICK THETFORD, M.D., Duke, 1938; *Medicine*.
 JOSEPH B. STEVENS, B.S., Davidson, 1932; M.D., Duke, 1935; *Neurology*.
 WILLIAM HENRY BRIDGERS, B.S. and M.D., Duke, 1936; *Surgery*.
 WILLIAM FREDWIN HOLLISTER, M.D., Duke, 1938; *Surgery*.
 DURWARD LEE LOVELL, M.D., Duke, 1936; *Surgery*.
 WILLIAM HENRY PETTUS, JR., B.S., Richmond, 1933; M.D., Cornell, 1937; *Surgery*.
 RUSSELL BEVERLY RAY, B.A. and M.D., Vanderbilt, 1935 and 1938; *Surgery*.
 WILL CAMP SEALY, B.S. and M.D., Emory, 1933 and 1936; *Surgery*.
 WARNER LEE WELLS, M.D., Duke, 1938; *Surgery*.
 RALPH A. ARNOLD, B.A., Rochester, 1932; M.D., Buffalo, 1936; *Otolaryngology and Ophthalmology*.
 ROBERT CARSON FUGATE, M.D., Duke, 1937; *Otolaryngology and Ophthalmology*.
 CHRISTOPHER STUART, JR., M.D., McGill, 1934; *Urology*.
 TROGLER FRANCIS ADKINS, M.D., Duke, 1935; *Obstetrics and Gynecology*.
 ELEANOR BEAMER EASLEY, B.A., Idaho, 1928; M.A., Iowa, 1929; M.D., Duke, 1934; *Obstetrics and Gynecology*.
 NELSON MORTIMER WEBSTER, M.D., Duke, 1937; *Obstetrics and Gynecology*.
 GORDON JOSEPH AXELSON, M.D., Duke, 1937; *Endocrinology*.
 LAURA EUGENIA ROSS, A.B., North Carolina, 1934; M.D., Pennsylvania, 1938; *Pediatrics*.
 WILLIAM REED WOOD, B.S., Wake Forest, 1936; M.D., Louisville, 1938; *Student Health*.
 GEORGE JAY BAYLIN, A.B., Johns Hopkins, 1932; M.D., Duke, 1937; *Röntgenology*.
 SAMUEL ELGART, B.S., M.D., Tufts, 1934 and 1938; *Biochemistry*.
 HAROLD I. HARVEY, A.B., Harvard, 1924; M.D., Duke, 1937; *Private Diagnostic Clinic*.
 PAUL LELAND WILLIAMS, B.S., Washington, 1933; M.D., Oregon, 1937; *Private Diagnostic Clinic*.

Internes

DAVID CAYER, B.A. and M.D., Duke, 1935 and 1938; *Medicine*.
 SAMUEL SUMMERFIELD LAMBETH, B.S., Randolph-Macon, 1934; M.D., Virginia, 1939; *Medicine*.
 ROBERT CARL LINCICOME, M.D., Duke, 1938; *Medicine*.
 JOHN HENRY MILLER MADDEN, A.B., Clemson, 1935; M.D., Johns Hopkins, 1939; *Medicine*.
 COLIN ALEXANDER MUNROE, B.S., Davidson, 1935; M.D., Duke, 1939; *Medicine*.
 KENNETH DURHAM WEEKS, B.S., Davidson, 1935; M.D., Duke, 1939; *Medicine*.
 JAMES MAZYCK WILSON, A.B., Princeton, 1933; M.D., South Carolina, 1937; *Medicine*.
 WILLIAM MORTON BOGART, JR., B.S., Davidson, 1935; M.D., Johns Hopkins, 1939; *Surgery*.
 WALTER DARLINGTON HASTINGS, JR., M.D., Duke, 1938; *Surgery*.
 KENNETH RUDOLPH KIESAU, M.D., Iowa, 1938; *Surgery*.
 HENRY MASON MORFIT, B.A. and M.D., Johns Hopkins, 1935 and 1939; *Surgery*.
 ALBERT ARCHER PARRISH, A.B. and M.D., Duke, 1933 and 1938; *Surgery*.
 PAUL WELSTEAD SCHANHER, JR., B.A. and M.D., Duke, 1935 and 1938; *Surgery*.

- JOSIAH CHARLES TRENT, A.B., Duke, 1934; M.D., Pennsylvania, 1938; *Surgery*.
 EULYSS ROBERT TROXLER, B.A. and M.D., Duke, 1934 and 1938; *Surgery*.
 DAVID A. WILSON, B.A., Wooster, 1932; M.A., Wesleyan, 1933; M.D., Ohio, 1938; *Surgery*.
 COLLINS FREMONT HALL, B.S., Gettysburg, 1934; M.D., Duke, 1938; *Otolaryngology and Ophthalmology*.
 EDWIN HALE THORNHILL, M.D., Duke, 1938; *Otolaryngology and Ophthalmology*.
 CHARLES EDGAR HAINES, JR., M.D., Duke, 1937; *Urology*.
 CHARLES ROSS DUNCAN, B.S. and B.S. in Med., Wake Forest, 1931 and 1933; M.D., Duke, 1938; *Orthopaedics*.
 ROBERT ALLEN KNIGHT, A.B., B.S. and M.D., Oklahoma, 1935, 1936 and 1938; *Orthopaedics*.
 ROBERT LEONHARDT ALTER, M.D., Duke, 1937; *Obstetrics and Gynecology*.
 COURTLANDT DIXON BERRY, B.A., Wesleyan, 1934; M.D., Duke, 1938; *Obstetrics and Gynecology*.
 ROBERT NOWELL CREADICK, B.A., Wesleyan, 1933; M.D., Yale, 1937; *Obstetrics and Gynecology*.
 ALBERT FRANCIS LEE, B.S., Puget Sound, 1935; M.D., Duke, 1937; *Obstetrics and Gynecology*.
 DAVID HUDSON FOGEL, B.S., Virginia, 1934; M.D., Duke, 1938; *Obstetrics and Pediatrics*.
 HAROLD BARKER KERNODLE, M.D., Duke, 1939; *Obstetrics and Pediatrics*.
 GLENN CARRAWAY NEWMAN, B.S. and M.D., Duke, 1938 and 1939; *Obstetrics and Pediatrics*.
 LOGAN EVERETTE SAWYER, B.A. and M.D., Duke, 1935 and 1939; *Obstetrics and Pediatrics*.
 WILLIAM STERRY BRANNING, B.S., North Carolina, 1934; M.D., Yale, 1939; *Pediatrics*.
 R. CHARMAN CARROLL, A.B., Duke, 1935; M.D., Colorado, 1939; *Pediatrics*.
 ERNEST BRINDLEY DUNLAP, JR., B.A. and M.D., Duke, 1935 and 1939; *Pediatrics*.
 EMMETT STEVENSON LUPTON, B.S., Wake Forest, 1936; M.D., New York, 1938; *Pediatrics*.
 IRA STANLEY ROSS, M.D., Duke, 1938; *Pediatrics*.
 WILLIAM LUCAS VENNING, JR., M.D., Duke, 1939; *Pediatrics*.
 CARLTON LEE OULD, B.A. and M.D., Duke, 1931 and 1937; *Roentgenology*.
 GEORGE GAYLAND GILBERT, B.S., Kenyon, 1934; M.D., Johns Hopkins, 1938; *Pathology*.
 ALFRED FAXON HENDERSON, B.A. and M.D., Duke, 1933 and 1937; *Pathology*.
 RUSSELL NAHIGIAN, B.S. and M.D., Yale, 1935 and 1939; *Pathology*.
 GEORGE ALLEN ZURKOW, D.D.S., Pennsylvania, 1939; *Dentistry*.
 WILLARD PHELPS EARNGEY, JR., B.A., Duke, 1938; *Administration*.
 REUBEN HOLMES GRAHAM, JR., B.S., North Carolina, 1938; *Administration*.
 WILLIAM WILSON LOWRANCE, B.S., Davidson, 1939; *Administration*.
 JOHN W. RANKIN, A.B., North Carolina, 1939; *Administration*.
 DEWITT WRIGHT, B.S. and J.D., Northwestern, 1923 and 1926; *Administration*.
 EUGENE TULIE BROWN, B.S. in Pharm., North Carolina, 1939; *Pharmacy*.
 WILLIAM VINSON PROCTOR, B.S. in Pharm., North Carolina, 1939; *Pharmacy*.

COMMITTEES OF THE SCHOOL OF MEDICINE

ADMINISTRATIVE COUNCIL OF THE SCHOOL OF MEDICINE

W. P. FEW, *President*

R. L. FLOWERS, *Secretary and Treasurer*

W. C. DAVISON, *Dean*

EXECUTIVE COMMITTEE

F. V. ALTVATER
BAYARD CARTER
W. C. DAVISON
G. S. EADIE

W. D. FORBUS
F. M. HANES
DERYL HART
W. A. PERLZWEIG

MARGARET I. PINKERTON
D. T. SMITH
F. H. SWETT

COMMITTEE ON THE CURRICULUM

G. S. EADIE (*Chairman*)
R. A. ROSS

E. L. PERSONS
R. R. JONES, JR.

H. M. TAYLOR
R. S. CRISPELL

COMMITTEE ON THE LIBRARY

W. A. PERLZWEIG
(*Chairman*)

W. D. FORBUS
C. E. GARDNER, JR.

F. M. HANES

COMMITTEE ON ADMISSION

F. H. SWETT
(*Chairman*)

E. P. ALYEA
W. D. FORBUS

F. M. HANES
DERYL HART

COMMITTEE ON EXAMINATIONS

F. H. SWETT
(*Chairman*)

D. T. SMITH

COMMITTEE ON INTERNSHIPS

E. C. HAMBLIN
(*Chairman*)

D. H. SPRUNT

W. C. DAVISON

BEAUMONT COMMITTEE

DERYL HART
(*Chairman*)

W. A. PERLZWEIG

D. T. SMITH

COMMITTEE ON STUDENT TECHNICIANS

D. T. SMITH
(*Chairman*)

BAYARD CARTER

H. M. TAYLOR

DISPENSARY COMMITTEE

J. M. RUFFIN
(*Chairman*)

R. A. ROSS
ROSS PORTER

C. E. GARDNER, JR.

REGIONAL REPRESENTATIVES OF THE COMMITTEE ON ADMISSION

Birmingham, Alabama.....	M. Y. DABNEY
Phoenix, Arizona.....	CHARLES B. PALMER
Los Angeles, California.....	J. MORRIS SLEMONS
San Francisco, California.....	EMILE F. HOLMAN
Montreal, Canada.....	WILDER PENFIELD
Denver, Colorado.....	FRANKLIN P. GENGENBACH
New Haven, Connecticut.....	ALLEN K. POOLE
Jacksonville, Florida.....	EDWARD JELKS
Atlanta, Georgia.....	JAMES E. PAULLIN
Savannah, Georgia.....	VICTOR H. BASSETT
Chicago, Illinois.....	GEORGE H. GARDNER
Iowa City, Iowa.....	PHILIP C. JEANS
Louisville, Kentucky.....	MALCOLM D. THOMPSON
New Orleans, Louisiana.....	PHILIP H. JONES, JR.
Baltimore, Maryland.....	JOHN T. KING, JR.
Boston, Massachusetts.....	MARSHALL N. FULTON
Detroit, Michigan.....	ROY D. McCCLURE
Minneapolis, Minnesota.....	ANGUS W. MORRISON
Kansas City, Missouri.....	RALPH H. MAJOR
St. Louis, Missouri.....	HUGH McCULLOCH
Butte, Montana.....	CAROLINE McGILL
New York, New York.....	LEONARD T. DAVIDSON
New York, New York.....	LAWRENCE S. KUBIE
New York, New York.....	JAMES B. MURPHY
New York, New York.....	BERTRAM J. SANGER
Rochester, New York.....	WILLIAM S. McCANN
Davidson, North Carolina.....	JOHN W. MacCONNELL
Cincinnati, Ohio.....	MONT R. REID
Cleveland, Ohio.....	B. S. KLINE
Columbus, Ohio.....	CHARLES A. DOAN
Dayton, Ohio.....	R. L. JOHNSTON
Toledo, Ohio.....	JOHN L. STIFEL
Warren, Ohio.....	R. D. HERLINGER
Portland, Oregon.....	KARL H. MARTZLOFF
Johnstown, Pennsylvania.....	W. FREDERIC MAYER
Palmerton, Pennsylvania.....	R. P. BATCHELOR
Philadelphia, Pennsylvania.....	JOHN T. BAUER
Pittsburgh, Pennsylvania.....	DAVENPORT HOOKER
Scranton, Pennsylvania.....	GEORGE A. CLARK
Columbia, South Carolina.....	WILLIAM WESTON
Columbia, South Carolina.....	JAMES H. GIBBES
Memphis, Tennessee.....	RAPHAEL E. SEMMES
Nashville, Tennessee.....	SAM L. CLARK
Fort Worth, Texas.....	KHLEBER H. BEALL
San Antonio, Texas.....	P. I. NIXON
Salt Lake City, Utah.....	ALFRED J. RIDGES
Charlottesville, Virginia.....	HENRY B. MULHOLLAND
Richmond, Virginia.....	I. A. BIGGER
Roanoke, Virginia.....	HUGH H. TROUT
Seattle, Washington.....	R. D. FORBES
Spokane, Washington.....	A. A. MATTHEWS
Huntington, West Virginia.....	GEORGE M. LYON

GENERAL STATEMENT

Duke University School of Medicine and Duke Hospital were established in 1925, through the munificent gift of the late James B. Duke. The *School of Medicine* has been planned to insure the greatest correlation between the various departments. These facilities are available also for students who are studying for degrees other than that of Doctor of Medicine. The School of Medicine has been approved as Class A by the American Medical Association and also is a member of the Association of the American Medical Colleges. On September 28, 1939, two hundred and fifty-eight students were enrolled.

FACILITIES OF THE HOSPITAL

Duke Hospital has every modern convenience for the diagnosis, proper care, welfare and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. It has 456 beds, which will be increased to 569 early in 1940, including 50 bassinets for newly born infants. *Medicine*, including dermatology, neurology and psychiatry, has 111 ward beds; *surgery*, including urology, otolaryngology, ophthalmology and orthopaedics, 105 ward beds; *obstetrics*, including *gynecology*, 56, and 50 bassinets; and *pediatrics*, 52. There are 82 private rooms and semiprivate cubicles, 7 operating rooms, 4 obstetrics delivery rooms, and accommodations for a resident staff of 82. Offices and examining rooms for the members of the Medical Faculty are located in the Hospital. The Hospital has been approved for internship and residencies by the Council on Medical Education and Hospitals of the American Medical Association.

Duke Hospital and its Public Dispensary were opened for patients on July 21, 1930. One hundred and thirty-one thousand individuals have been examined, diagnosed, and treated up to October 1, 1939. The average daily census of hospital patients is 350; 66,946 visits were made to the Public Dispensary during the past year. Fifteen per cent of the patients come from within a radius of twenty miles, the remaining 85 per cent come from over 98 of the 100 counties in North Carolina and from 34 other states. The average distance traveled by the patient is more than 70 miles.

Every effort is being made to co-operate with the medical profession, and patients are asked to return to the physicians who referred them to the Hospital and Clinic.

PUBLIC WARD PATIENTS. Duke Hospital cannot give charity treatment to all who apply; therefore patients whose incomes are less than \$15 per week should apply to the Public Dispensary Division of the Duke Clinic on the days and hours listed below. The hospital fees consist of four classes of flat daily rates (private, semiprivate, semicharity, and charity), which cover all hospital costs, including those usually charged as

extras, thereby making it possible to estimate, in advance, the probable cost of hospitalization and to adjust the bill to the patient's resources. This policy of basing the rate upon the amount the patient can pay, rather than on the actual cost, has enabled many, who, under the former system, unnecessarily were objects of charity, to maintain their self-respect by contributing a fixed sum within their means. The actual cost to the Hospital for public care is over \$5.00 daily; but in order to meet the greatly increased demand for charity work, Duke Hospital adopted the co-operative plan of paying half the cost, provided the patient's local welfare department co-operated by paying the other half. This is in accordance with Mr. Duke's plan that the communities share, with the Duke Endowment, the burden of charity patients, instead of either carrying all of it. Although 87 per cent of the patients pay less than cost, the revenue from patients, their friends, the counties, and the Duke Endowment provides approximately half of their expenses. By having every patient contribute in accordance with his means, the balance, which Duke Hospital gives in charity or less than cost service, has been spread over a larger number of people. Instead of giving complete and pauperizing charity care to four thousand patients, the Hospital has been able to assist approximately thirteen thousand individuals annually to obtain medical care for which they could not pay the full cost.

PUBLIC DISPENSARY DIVISION OF THE DUKE CLINIC. The general policy of admitting patients to the Public Dispensary and Wards is to consider carefully their financial and social status; income and size of family, special responsibilities and the probable cost of treatment, all being weighed in determining admission. A married patient, for instance, with an income of less than \$15 per week is considered admissible to the Public Wards or Public Dispensary for ordinary conditions; the income limit, of course, varying according to the other factors which affect the patient's financial status. Those who are able to pay the ordinary fees of consultants and specialists are not admitted to the Public Dispensary, but may make arrangements through their own physicians for examinations by any member of the Hospital Staff or in the Private Diagnostic Clinic.

SCHEDULE OF THE PUBLIC DISPENSARY DIVISION OF THE DUKE CLINIC. Closed on Saturdays, Sundays, and holidays. Patients must register at the times listed. Appointments should be made in advance.

Registration hours: White patients, 12:15 P.M., and colored patients at 1:00 P.M., unless otherwise noted below.

General Medicine
General Surgery
Obstetrics and Gynecology
(Women's Diseases)
Children's Diseases*
Ear, Nose, and Throat
Bone and Joint Diseases
Tumors
Dentistry

*Monday, Tuesday, Wednesday, Thursday,
and Friday.*

* Also at 9 A.M.

Urinary and Kidney Diseases: *Tuesday and Friday.*

Cystoscopy: *Monday, Wednesday, and Friday.*

Eye: *Tuesday, Wednesday, Thursday, and Friday.*

Syphilis: *Thursday, Children at 9:00 A.M., and Adults at 6:00 P.M.*

Asthma and Hay Fever: *Tuesday at 9:00 A.M. and Friday at 1:00 P.M.*

Diabetes
Infant Feeding } *Tuesday at 9:00 A.M.*

Dermatology: *Wednesday at 9:00 A.M.*

Fracture: *Friday at 9:00 A.M.*

Pneumothorax (chest and tubercular): *Thursday at 9:00 A.M.*

Endocrine (sterility, menstrual disorders, etc.): *Tuesday, Wednesday, Thursday, and Friday 8:30 A.M.-12:00 M.*

Hematology (diseases of the blood): *Monday at 1:00 P.M.*

Bronchoscopy: *Monday at 1:00 P.M.*

Neurology: *Wednesday at 9:00 A.M.*

The Public Dispensary charge is from \$1.00 to \$5.00 for the first visit to any department, plus the actual cost of X rays and other materials used. For the return visits, to the regular clinics, the rate is from twenty-five cents to seventy-five cents for consultation or completion of examination; and \$1.00 for patients who have not been instructed to return, but who do so on their own initiative. In order to co-operate with the medical profession, anyone who wishes to attend the Public Dispensary should consult, and bring a letter from his or her own physician. All patients accompanied by their physicians are admitted free to the Public Dispensary Division.

PRIVATE PATIENTS. Patients who can pay the ward and private rates may at any time, through their family physicians, in consultation with any member of the Hospital Staff, make reservations by telephoning to the Admitting Office. Appointments for private examinations and treatments may be made in advance by telephoning to members of the Hospital Staff or to the Private Diagnostic Division of the Duke Clinic.

PRIVATE DIAGNOSTIC DIVISION OF THE DUKE CLINIC. This division was organized to co-ordinate the diagnostic studies, and to give better care for the complicated problems arising in the examination of private patients. The Clinical Staff of Duke Hospital and School of Medicine forms the professional staff of this Clinic, while the financial side is handled by a business manager. The offices and examining rooms are in Duke Hospital, and all the laboratory and diagnostic facilities of the Hospital and School of Medicine are utilized by the Clinic. A complete diagnostic survey usually requires from one to four days, and the charges generally range from \$15 to \$75, the amount depending on the work required and on the financial condition of the patient. As soon as each examination has been completed, a full report describing the results of the diagnostic studies is forwarded to the physician referring the patient.

SCHOOL OF NURSING

MARGARET I. PINKERTON, B.S., R.N., *Dean of the School of Nursing and Professor of Nursing.*

BESSIE BAKER, B.S., R.N., *Dean Emeritus of the School of Nursing.*

ANNE H. GARDINER, B.S., M.S., R.N., *Assistant Professor of Nursing Education.*

JULIA E. WHITE, A.B., R.N., *Assistant to the Dean.*

HILDA C. BURNHAM, R.N., *Assistant to the Dean.*

The next class of students will be admitted to the Duke University School of Nursing on September 24, 1940, but applications will be considered at any time after January 1, 1940. The requirements for the class entering in 1940 are completion of one year of acceptable college work in an accredited college or university. Students entering in 1940 are eligible for the Diploma of Graduate Nurse after three years of eleven months each in the School of Nursing. Those who have had or who take a second year of acceptable college work are eligible for the degree of Bachelor of Science in Nursing. For the class entering in 1941, two years of acceptable college work (60 semester hours) in an accredited college or university will be required. Students entering in 1941 are eligible both for the Diploma of Graduate Nurse and the degree of Bachelor of Science in Nursing after three years of eleven months each in the School of Nursing. The tuition is \$100 per year. Further information, application forms, and bulletins may be obtained by writing to the Dean, Duke University School of Nursing, Durham, N. C.

SCHOOL OF DIETETICS

ELSIE W. MARTIN, A.B., M.S., *Professor of Dietetics.*

JANE HEREFORD, B.S., *Administrative Dietitian.*

FRANCES CAMPBELL, B.S., *Therapeutic Dietitian.*

ADA HOWE, B.S., *Therapeutic Dietitian.*

MILDRED C. DUFF, B.S., *Administrative Dietitian.*

GLADYS C. HASS, B.S., *Administrative Dietitian.*

In addition to the training of medical students and nurses in dietetics, six student dietitians may be admitted to the School of Dietetics and given the certificate of graduate dietitian after the successful completion of one year. The entrance requirements are a Bachelor's degree from an approved university or college, with majors in nutrition and institutional management, and the courses in chemistry, biology, social science and education recommended by the American Dietetic Association. The course for student dietitians provides instruction in all phases of hospital and institutional dietetics, including experience from the buying and storage of food to its service to the patient according to the doctor's orders. In addition, the student dietitians are required to complete the courses in biochemistry, nutrition, and selected portions of physiology as given to the medical students.

More detailed information and application blanks may be obtained from the Professor of Dietetics, Duke University School of Dietetics, Durham, N. C. The course starts the first Monday in September, but applications

for appointments should be made before February 1. No tuition is charged, but a registration fee of \$10 is payable at the time of appointment; maintenance is provided.

HOSPITAL ADMINISTRATION

F. V. ALTVATER, A.B., A.M., *Superintendent*.
 F. R. PORTER, A.B., *Assistant Superintendent*.
 H. C. MICKEY, B.B.A., *Assistant Superintendent*.
 C. H. COBB, Ph.G., *Business Manager Medical Division*.
 E. S. RAPER, A.B., *Business Manager Surgical Division*.

Three or four internships in hospital administration are available to university graduates, whose character, tact, and ability for leadership are good, and whose academic standing is high. These internships are of three years' duration and pay a small salary in addition to room, board, and laundry. Vacations of one month are allowed at the beginning of the second and third years of interneshp.

The instruction is practical rather than theoretical in emphasis. The internes are rotated through five different assistant administrative positions in the Hospital. There is also a weekly seminar lasting two hours. Further information may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C.

SCHOOL FOR LABORATORY TECHNIQUE

DAVID T. SMITH, A.B., M.D., *Professor of Bacteriology*.
 HAYWOOD M. TAYLOR, B.S., M.S., Ph.D., *Associate Professor of Biochemistry*.
 JAMES R. KLEIN, A.B., Ph.D., *Instructor in Biochemistry*.
 OSCAR C. E. HANSEN-PRÜSS, A.B., M.D., *Associate Professor of Medicine*.
 DONALD S. MARTIN, A.B., M.D., *Associate Professor of Bacteriology and Mycology*.

The course in laboratory technique includes training in blood chemistry, clinical microscopy, bacteriology, serology, basal metabolism, and pathology. The course, which is approved by the Registry of Technicians of the American Society of Clinical Pathologists, begins August 1 and lasts eighteen months. Two years of college work are required with credits in biology or zoology, and inorganic, analytical and organic chemistry. The registration fee is \$65, and there are no additional charges, except for breakage. The students live in town at their own expense. Applications may be sent to Dr. David T. Smith, Duke Hospital, Durham, N. C.

ANESTHESIA

MARY MULLER, R.N., *Instructor in Anesthesia*.
 MARY H. SNIVELY, R.N., *Instructor in Anesthesia*.
 ELIZA GOODMAN, R.N., *Assistant in Anesthesia*.
 ALMA S. HAMM, *Assistant in Anesthesia*.

Duke Hospital offers to registered nurses from accredited schools of nursing a twelve months' course in anesthesia, which includes the theory and practice of anesthesia. The tuition fee of \$100 covers all expenses of the course, including maintenance. Applications may be sent to Miss Mary Muller, Duke Hospital, Durham, N. C.

MEDICAL SOCIAL SERVICE

PERRY GIBSON, A.B., B.S., M.S., *Instructor in Medical Social Service.*

ELMA O. PHILLIPSON, A.B., M.A., *Assistant in Medical Social Service.*

MARIA FERRO, A.B., M.A., *Assistant in Medical Social Service.*

CAROLINE KELLER, A.B., B.S., M.S., *Assistant in Medical Social Service.*

Case work service is offered to patients referred by physicians within the Hospital, by outside social service agencies, or upon the patient's own application. Assistance and advice in connection with the problems presented are available to the members of the Staff and referring agencies. The division also provides lectures, consultations, and discussions for students of medicine and nursing, and serves as an agency for supervised field work experience for students of the graduate school of the University of North Carolina. Further information concerning training for advanced students may be obtained from the Social Service Division, Duke Hospital, Durham, N. C.

RECORD LIBRARY

JESSIE HARNED, R.R.L., *Medical Records Librarian*

A course for the training of medical records librarians has been instituted at Duke Hospital. This course, which has been given full approval by the American Association of Medical Records Librarians, includes all details of the theory and practice of clinical record library methods. The length of the training is eleven months. The tuition fee is \$100 and does not include maintenance. Applications may be made to the Medical Records Librarian, Duke Hospital, Durham, N. C.

MEDICAL SECRETARIAL SCHOOL

Duke Hospital offers a course of approximately four months, for medical secretaries, which gives them thorough training in the technicalities of medical secretarial work, medical terminology, medical shorthand, and ediphone transcription. The completion of a secretarial or business course is required for admission. A small remuneration is given. After this medical secretarial training, those who have proved capable are sometimes placed in positions in the Hospital as vacancies occur. Application should be made to the Medical Records Librarian, Duke Hospital, Durham, N. C.

POSTGRADUATE STUDY

The School of Medicine is not limited to the training of its own students and Staff, but extends to the members of the medical profession the benefit of everything it has. Graduates in medicine are welcomed especially at the various clinics and demonstrations in medicine, surgery, obstetrics, and other specialties, which are held from 9 A.M. to 12:30 P.M. each Saturday and at the clinical-pathological conferences at 5 P.M. on Wednesdays. Postgraduate internships, for one or two weeks, are available to physicians in practice. A fee of \$10 per week is charged for room and board. A three-day postgraduate symposium is given each

October. Further information may be obtained by writing to the head of the department concerned or to the Dean.

INTERNESHIPS AND RESIDENCIES

Internships of one year's duration with room, board, laundry, and uniforms furnished, but without salary, are available in *surgery* (including general surgery, urology, and orthopaedics), in *orthopaedics*, in *otology*, in *otolaryngology*, in *dentistry*, in *obstetrics and gynecology*, in *endocrinology*, in *pediatrics*, and in *pathology*, commencing each July and September.

Medical internships (including dermatology, neurology, and psychiatry) are of two years' duration, the interne rising by progressive stages of four months each to senior house officer. After one year's service the interne has the rank and emoluments of an assistant resident. Services begin in July, November, and March.

Application blanks for all internships, which must be returned by November 1, may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C. Graduates of any Class A medical school are eligible for internships.

After the completion of an internship in Duke Hospital or in another acceptable hospital, a certain number may be appointed as assistant residents in medicine, surgery, obstetrics and gynecology, pediatrics, neuropsychiatry, orthopaedics, urology, otolaryngology, roentgenology, pathology, biochemistry, or the Student Health Service, or as fellows of the Private Diagnostic Clinic, at a salary of \$250 to \$500 per year with maintenance, and eventually may be promoted to the residency in the various departments or subdepartments of the Hospital at an annual salary of \$500 to \$1,000 with maintenance. Applications should be made to the head of the department concerned.

The Hospital and School of Medicine are an integral part of the Duke University campus and its educational, recreational, and athletic facilities are available for the Resident Staff.

The present Resident Staff of eighty-four consists of a resident, six assistant residents, and seven internes in *medicine*; a resident, seven assistant residents, and nine internes in *surgery* (the seven surgical assistant residents are assigned in rotation to *general surgery*, *pathology* and *orthopaedics*); a resident, two assistant residents, and two internes in *otolaryngology and ophthalmology*; a resident, three assistant residents, and six internes in *obstetrics and gynecology*; an assistant resident in *endocrinology*; a resident, an assistant resident and six internes in *pediatrics*; a resident in *radiology*; two residents, an assistant resident and an interne in *roentgenology*; a resident and two internes in *orthopaedics*; a resident, an assistant resident and an interne in *urology*; a resident in *neuropsychiatry*; an assistant resident in *neurology*; a resident and three internes in *pathology*; an assistant resident in *biochemistry*; two assistant residents in the *Private Diagnostic Clinic*; one interne in *dentistry*; an

assistant resident on the *Student Health Service*; five internes in *Administration*; and two internes in *Pharmacy*.

LIBRARY

JUDITH FARRAR, A.B., B.S., *Librarian*.

MILDRED PERKINS FARRAR, *Assistant Librarian*.

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."—SIR WILLIAM OSLER.

In addition to the general library of Duke University and the departmental libraries of biology, chemistry, physics, etc., which have 532,544 volumes available for medical students, Duke Hospital Library contains 36,768 volumes of American and foreign medical literature and subscribes to 412 current American and foreign medical and other scientific journals. These books and journals are available daily from 8:20 A.M. to 11:00 P.M. for the students, nurses, staff, and medical profession.

MEDICAL CARE

JOSEPH A. SPEED, *Physician in Charge*.

JUNE B. THOMAS, *Assistant Physician*.

W. REED WOOD, *Assistant Physician*.

With the exceptions noted below, full medical and surgical care is furnished to all regularly matriculated medical students of the University for the health fee of \$3.33 per quarter. This service is under the direction of the Physician in Charge with the co-operation of the Staff of Duke Hospital. It includes hospitalization (limited to thirty days), medical and surgical care, drugs, dressings, X-ray studies, and ward but not special nursing. A charge for board is made at the same rate as in the University dining halls, and student meal tickets for these halls are accepted in payment of this board. Refraction of eyes and treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernias, elective surgery, chronic skin condition, endocrine disturbances, etc., or accidents or illnesses occurring during vacations or while off the campus, are not included in this service. The cost of any necessary braces and orthopaedic appliances, as well as of special nursing, must be borne by the student.

STUDENT GOVERNMENT

The members of the student body elect an Honor Council in which each class is represented. It is the duty of the Honor Council to hear all cases involving breaches of conduct on the part of members of the student body. All new students entering the School are required to comply with this system of government.

THE DUKE UNIVERSITY MEDICAL SOCIETY

This society was organized to facilitate the presentation of current medical problems before the students, the Staff, and other interested persons in the University and professional community. Meetings are held

monthly during the academic year, and the programs usually consist of short case presentations and discussions followed by a description of some staff or student research project. Occasionally guest speakers from other institutions are invited to participate in the programs.

APPLICATION FOR ADMISSION

Application forms may be obtained by writing to the Committee on Admission, Duke University School of Medicine, Durham, N. C. They must be typed, a 2 x 2½ inch recent photograph attached, and the application returned to the Committee on Admission as soon as possible. Applications are considered in the order received. If the information obtained is satisfactory, a personal interview with the Committee on Admission or a Regional Representative is arranged for the applicant. The candidate then is notified as soon as possible whether he has been accepted or declined; if accepted, the student must send a deposit of \$50 within two weeks to insure his enrollment. This money is applied toward the tuition. First-year students are admitted only at the beginning of the Autumn Quarter, but applications should be received by the Committee on Admission prior to March 15; they will be considered and a decision in regard to admission will be made as soon as possible. The number of students in each class is limited to 75, but only those students will be accepted who give promise of being a credit to the School and the medical profession. Women are received on the same terms as men. Students who transfer from other medical schools may be admitted into any quarter for which their previous training has fitted them. The Committee on Admission will determine the status of each such student on his own merits.

REQUIREMENTS FOR ADMISSION

"I request that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for life."—JAMES B. DUKE.

Intelligence and character are the essential qualifications for admission.

In addition, each candidate must have the following preparation, which includes the minimal requirements for Class A medical schools:

1. At least three years of college work (90 semester hours), including:
2. *Biology*: At least one year (12 semester hours, one half of which must be laboratory work, and must include training in embryology). A course in comparative anatomy also is recommended.
3. *Chemistry*: At least two years (10 semester hours of inorganic chemistry including short or preliminary courses in qualitative and quantitative analysis, and 6 semester hours of organic chemistry; one half of each course must be laboratory work). These represent the minimal requirements in chemistry. Additional courses in analytical and physical chemistry, but not in biochemistry, are desirable. Also see Biochemistry, page 36.

4. *Physies*: At least one year (10 semester hours, one half of which must be laboratory work).

5. *Mathematics*: At least one year (6 semester hours; a working knowledge of logarithms is essential, and one of calculus is desirable).

6. *Language*: Required—two years of *English* (12 semester hours). A reading knowledge of scientific German is highly recommended.

7. Applicants are required to take the aptitude tests of the Association of American Medical Colleges unless specifically excused by the School. These tests are given at most of the colleges and universities in December.

Selection is based on the *quality* rather than the *quantity* of preparation.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICINE

After completion of ninety semester hours in Duke University or another approved university or college, and six quarters in the Duke University School of Medicine, Duke University, on the recommendation of the Executive Committee, grants the degree of Bachelor of Science in Medicine to medical students who have completed creditable investigative work, prepared an acceptable report of the investigation, and passed an examination upon the subject of the investigation before an advisory committee. Students who elect to undertake work toward this degree must obtain written permission from the Executive Committee after approval of their program by the head of the department in which the work is to be done. No credit toward this degree is given for additional college work, and students who have a Bachelor's degree are not eligible, but all students in good standing are encouraged to undertake such investigative work as they may elect when approved by the Curriculum Committee and the head of the department in which they wish to work.

REQUIREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE

The degree of Doctor of Medicine is conferred on those who have completed, to the satisfaction of the Executive Committee, the twelve quarters of the curriculum of the School of Medicine, the preclinical and clinical examinations, and have signed an agreement that they will spend at least two of the succeeding three years in hospital or laboratory work acceptable to the Executive Committee. As a guarantee of this pledge, the diploma is deposited in the Treasurer's Office until after the completion of this training. Failure to fulfill this agreement constitutes a waiver of any claim to possession of the diploma and the degree of Doctor of Medicine.

DEPARTMENTS OF INSTRUCTION

Anatomy

F. H. SWETT, *Professor of Anatomy.*

D. C. HETHERINGTON, *Associate Professor of Anatomy in Charge of Histology and Neurology.*

W. H. HOLLINSHEAD, *Assistant Professor of Anatomy.*

J. W. EVERETT, *Assistant Professor of Anatomy.*

K. A. YOUNGSTROM, *Instructor in Anatomy.*

T. L. PEELE, *Instructor in Anatomy.*

G. J. BAYLIN, *Instructor in Anatomy and Assistant in Roentgenology.*

H. S. MUNROE, *Assistant in Anatomy.*

R. B. RAY, *Assistant in Surgery and in Anatomy.*

H. FINKELSTEIN, *Assistant Professor of Surgery in Charge of Surgical Anatomy.*

JANE STANLEY CRAIG, *Research Assistant.*

Five days per week during the Autumn Quarter and two days per week during the Winter Quarter are scheduled for the *required* courses of instruction in gross human anatomy, histology, and neurology. In all of this work considerable freedom is allowed the student in his selection of working hours and in the planning of his own methods of attack. Emphasis is placed upon the study of material in the laboratory, supplemented by a few lectures and by frequent small-group conferences upon any phases of the work then current. All of the instruction is designed to be as informal and as nearly individual as possible. General principles and the functional viewpoint of living anatomy are stressed in the hope that the student may be stimulated to secure a working knowledge of anatomy in the broadest sense. Whenever possible, fresh tissues and living cells are made available for examination, and clinical cases exemplifying anatomical principles are studied whenever they are available at appropriate times. Through the co-operation of the Department of Roentgenology, the students are given an opportunity to study portions of the living human body as revealed by the fluoroscope and roentgenograph.

Applied Anatomy. In the Spring Quarter a laboratory and conference course is offered to second-year students. The topics considered are arranged to correlate so far as possible with the work in physical diagnosis. Small groups of students are met once a week for a discussion of the anatomical problems raised by their laboratory and clinical studies.

Surgical Anatomy. This course is offered by members of the surgical staff and is open to a limited number of senior students. Anatomy as applied to surgery is studied, at the dissecting table, from the diagnostic and the operative points of view. Winter Quarter only, Tuesday and Thursday mornings.

Advanced Studies in Anatomy. Further work in the several branches of anatomy may be arranged for at any time. Prospective candidates for such work should discuss their wants with the member of the Staff in charge of the particular field in which work is requested because only a

small number can be accommodated at any one time. A few properly qualified students may be permitted to undertake original research under the direction of various members of the Staff.

Biochemistry

W. A. PERLZWEIG, *Professor of Biochemistry.*
H. M. TAYLOR, *Associate Professor of Biochemistry and Toxicology.*
MARY L. C. BERNHEIM, *Assistant Professor of Biochemistry.*
ANNE YATES, *Assistant Professor of Biochemistry.*
HANS NEURATH, *Assistant Professor of Biochemistry.*
T. B. COOLIDGE, *Associate in Biochemistry.*
W. M. NICHOLSON, *Associate in Medicine and Biochemistry.*
J. S. HARRIS, *Associate in Pediatrics and Biochemistry.*
J. R. KLEIN, *Instructor in Biochemistry.*
SAMUEL ELGART, *Assistant in Biochemistry.*
EDWARD D. LEVY, *Assistant in Biochemistry.*
H. R. SARETT, *Assistant in Biochemistry.*

The *required* course in general biochemistry for first-year students is given in the Autumn and Winter Quarters. One morning each week in the Autumn Quarter is devoted, in discussion groups, to the correlation of the fundamental facts and theories of physical and organic chemistry with the chemistry of living organisms. In the Winter Quarter three lectures and four laboratory periods per week, supplemented by systematic reading and weekly conferences in small groups, are devoted to a more intensive study of the chemistry of the physiological processes of digestion and absorption, circulation and respiration, acid-base and salt equilibrium, metabolism including quantitative urine and blood analyses.

Since the success of the students in this course is largely determined by the adequacy and ready availability of their premedical training, it is urged that all students review the fundamental laws, theories, and facts of chemistry before the beginning of the course. A circular outlining the topics requiring special attention is sent to all students upon admission. Additional copies of the circular may be obtained from the Dean's Office. An examination to test the state of preparation of the student is given in the beginning of the course in biochemistry.

Electives. In connection with the course given in the Spring Quarter for second-year students a survey of pathological and clinical chemistry is presented. In this course are covered abnormalities of: protein, fat and carbohydrate metabolism, acid-base regulation, salt and water distribution, nitrogen retention, calcium and phosphorus metabolism, blood and derived bile pigments. The discussion of these topics is based upon case histories, including the records of the Clinical Chemical Laboratory of the Hospital.

Biochemical Research. The facilities of the department, including various types of research equipment and the clinical material of the blood chemistry laboratory, are available to properly qualified students for independent or supervised investigations. Chemical investigations of problems in biochemistry or in conjunction with the clinical departments and the Department of Pathology may be carried on.

Seminar in Toxicology. A round-table discussion of the homicidal suicidal and industrial poisons, alcoholism, etc. Autumn or Spring Quarters by arrangement.

Laboratory Detection of Common Poisons. A laboratory course in the properties, detection, and identification of the common poisons. Consideration is given to the types of material to be examined, legal precautions to be taken and interpretation of the findings. Autumn or Spring Quarters by arrangement.

Chemistry of the Colloidal State. A two-hour seminar is given weekly throughout the Autumn, Winter, and Spring Quarters.

Physiology, Pharmacology, and Nutrition

G. S. EADIE, *Professor of Physiology and Pharmacology.*

F. D. MCCREA, *Associate Professor of Physiology and Pharmacology.*

FREDERICK BERNHEIM, *Associate Professor of Physiology and Pharmacology.*

W. J. DANN, *Associate Professor of Physiology and Nutrition.*

MACDONALD DICK, *Associate in Medicine, Physiology and Pharmacology.*

E. L. PERSONS, *Associate in Medicine, Dermatology, and Physiology.*

PHILIP HANDLER, *Associate in Physiology and Nutrition.*

J. E. MORGAN, *Instructor in Roentgenology and Physiology.*

H. I. KOHN, *Instructor in Physiology and Pharmacology.*

The *required* courses consist of (a) a lecture course in physiology, (b) a lecture course in pharmacology, (c) a lecture course on the elements of nutrition, supplemented by demonstrations of some biological and chemical methods employed in nutrition studies, (d) a laboratory course in physiology and pharmacology, and (e) a seminar in which the problems arising in the laboratory and in the student's reading are discussed.

Elective courses covering particular aspects of these subjects, including pathological physiology and research in special fields, are available.

Research. A few properly qualified students are permitted to undertake original research in physiology, pharmacology, or nutrition under the direction of various members of the Staff.

Pathology

W. D. FORBUS, *Professor of Pathology.*

D. H. SPRUNT, *Associate Professor of Pathology.*

R. D. BAKER, *Assistant Professor of Pathology.*

C. C. ERICKSON, *Instructor in Pathology.*

J. U. GUNTER, *Instructor in Pathology.*

B. C. NALLE, JR., *Voluntary Assistant in Pathology.*

The *required* course in general pathology for second-year students is given in the Autumn and Winter Quarters. The class is divided into small groups, one instructor and an assistant being assigned to each group. For the purpose of teaching the gross pathological alterations of tissue, the museum material, which consists of complete cases preserved as units, has been classified into well-organized groups, such as obstructions, diseases due to animal parasites, tumors, etc., each group of materials being placed in a separate laboratory. The various student groups work with these groups of material in rotation. The microscopic aspects of path-

ological processes are studied by the students at the same time the gross pathological features of the disease are being considered. Physiological, chemical and bacteriological phases of the various disease processes are presented to the student by constant reference to the autopsy protocols and clinical studies of the cases which are being considered by the groups, and by visits to the hospital wards. Once each week a clinic is presented for the class; the subjects of the clinics are cases from the Hospital which illustrate pathological processes being currently studied. Lectures on general subjects of wide application are given in co-ordination with the museum case studies. Attendance at autopsies is required of the students of the second year, the class being divided into small groups which are called in turn. The group members are required to follow all studies of the cases which they see and to prepare their own complete records. Cases thus prepared are presented by the students before the entire class under the direction of the Staff.

Elective courses in pathology in the Spring Quarter are available for a limited number of students who have completed the course in general pathology. Research facilities are provided in the department for students who are competent to undertake investigation.

On Wednesdays at 5 P.M., during the Autumn, Winter, and Spring Quarters, a clinical-pathological conference is held in co-operation with the staffs of the clinical departments. While this conference is designed especially for the Hospital Staff, it is open to all members of the medical profession and students of medicine. Students of the second, third, and fourth years routinely attend this conference. A gross diagnostic clinical-pathological conference on current autopsies is held weekly in collaboration with the clinical departments. This conference is required of the students of the third and fourth years.

Bacteriology and Parasitology

D. T. SMITH, *Professor of Bacteriology and Associate Professor of Medicine.*
A. S. PEARSE, *Professor of Zoology.*
H. W. BROWN, *Professor of Preventive Medicine and Public Health.*
D. S. MARTIN, *Associate Professor of Bacteriology and Associate in Medicine.*
N. F. CONANT, *Assistant Professor of Bacteriology and Mycology.*
MARY A. POSTON, *Instructor in Bacteriology.*
N. BOWMAN WISE, *James A. Greene Research Fellow in Medicine and Bacteriology.*

Bacteriology, Mycology, Immunology, and Parasitology. The required course is given in the Autumn Quarter of the second year. An intensive study is made of the common bacteria, fungi, and parasites which cause disease in man. The scope of the laboratory course is reasonably wide and acquaints the student with all the methods and procedures employed in bacteriological laboratories. Most of the lecture time is devoted to the bacteriological and epidemiological aspects of infection. We are especially interested in the student's having a clear conception of: (1) how organisms gain entrance to the body, (2) the type of poisons which they produce, (3) the nature of immune bodies which are produced by the

host, and (4) the methods of preventing the disease by active and passive immunization. *Research Bacteriology*. Opportunities for original investigations are afforded a few specially qualified students. *Clinical Bacteriology*. During their clinical clerkships on medicine (one quarter each for Junior and Senior classes), the students may perform the routine and special bacteriological work for the patients assigned to them on the teaching service, under the direction of the Department of Bacteriology and in parallel with the Biological Division of the medical clinics.

Medicine

- FREDERIC M. HANES, *Florence McAlister Professor of Medicine*.
 D. T. SMITH, *Professor of Bacteriology and Associate Professor of Medicine*.
 R. S. CRISPELL, *Associate Professor of Neuropsychiatry*.
 J. M. RUFFIN, *Associate Professor of Medicine in Charge of Physical Diagnosis*.
 O. C. E. HANSEN-PRÜSS, *Associate Professor of Medicine in Charge of Clinical Microscopy*.
 CHRISTOPHER JOHNSTON, *Assistant Professor of Medicine and Physiology*.
 D. S. MARTIN, *Associate Professor of Bacteriology and Associate in Medicine*.
 E. L. PERSONS, *Associate in Medicine and Dermatology*.
 WALTER KEMPNER, *Associate in Medicine*.
 MACDONALD DICK, *Associate in Medicine, Physiology and Pharmacology*.
 E. S. ORGAIN, *Associate in Medicine*.
 R. W. GRAVES, *Associate in Neurology*.
 J. P. HENDRIX, *Associate in Medicine*.
 W. M. NICHOLSON, *Associate in Medicine and Biochemistry*.
 SUSAN G. SMITH, *Associate in Medicine*.
 J. L. CALLAWAY, *Associate in Medicine, Dermatology and Syphilology*.
 J. A. HITCH, *Instructor in Dermatology and Syphilology*.
 S. W. BAREFOOT, *Fellow in Dermatology and Syphilology*.
 D. E. PLUMMER, *Instructor in Syphilology*.
 M. D. KEMP, *Instructor in Psychiatry*.
 T. T. JONES, *Instructor in Medicine*.
 S. C. HALL, *Instructor in Medicine*.
 O. N. SMITH, *Instructor in Medicine*.
 E. B. CRAVEN, JR., *Instructor in Medicine*.
 I. H. MANNING, *Instructor in Medicine*.
 N. BOWMAN WISE, *James A. Greene Research Fellow in Medicine and Bacteriology*.
 RAYMOND REISER, *Anna H. Hanes Research Fellow in Medicine*.
 WM. SCHULZE, *Instructor in Medicine*.
 R. L. CRAIG, *Instructor in Neuropsychiatry*.
 D. W. LESTER, *Instructor in Neuropsychiatry*.
 G. T. HARRELL, JR., *Assistant in Medicine*.
 R. R. CARTER, *Assistant in Medicine*.
 H. I. HARVEY, *Assistant in Medicine*.
 J. D. HOUGH, *Assistant in Medicine*.
 A. H. JOISTAD, JR., *Assistant in Medicine*.
 G. M. STROUD, *Assistant in Medicine*.
 J. D. THETFORD, *Assistant in Medicine*.
 C. B. VAN ARSDALL, JR., *Assistant in Medicine*.
 P. M. WILLIAMS, *Assistant in Medicine*.
 J. B. STEVENS, *Assistant in Neurology*.
 VINCE MOSELEY, *Assistant in Dermatology and Syphilology*.
 I. T. REAMER, *Instructor in Pharmacy*.
 P. W. SMITH, *Assistant in Clinical Microscopy*.

Clinical Microscopy is given in the Winter Quarter of the second year. The course includes the essentials of hematology and the examination of

fresh material, such as urine, stools, spinal fluid, sputum, transudates and exudates. The most important parasites of man are studied by the use of fresh and museum material. Second-year and Senior students are given opportunities for special work and for investigation.

Physical Diagnosis and Introduction to Clinical Medicine. This course, in the Spring Quarter of the second year, consists of instruction in history taking, physical examination, and the application of the preclinical sciences to the interpretation of findings. All departments, preclinical and clinical, including the specialties, participate. The importance of co-operation between clinic and laboratory is emphasized, and the preclinical departments extend the teaching of their particular branches in correlation with other preclinical and clinical studies. In this manner the course serves as an introduction to clinical medicine. The class is divided into sections of not more than ten students, and each student is given individual instruction.

Junior Medicine. Junior students are assigned in small groups for one quarter to the medical wards as clinical clerks. Teaching rounds are held from 8:30 to 9:30 A.M., on Mondays, Wednesdays, and Fridays. During the Autumn, Winter, and Spring Quarters, medical clinics are given on Mondays, Wednesdays, and Saturdays at 11:30 A.M., and on Wednesdays, during the Summer Quarter.

Therapeutics. Each group of Junior students receives practical instruction in *pharmaceutics* under the guidance of an instructor in Pharmacy. On Tuesdays and Thursdays from 1:30 to 2:30 P.M. bedside instruction is given in *applied pharmacology and therapeutics* to the group on Junior Medicine.

Senior Medicine. Senior students are assigned for one quarter to the Dispensary as clinical clerks. Teaching rounds are held from 9:30 to 11:30 A.M. on Mondays and Fridays. Seniors attend medical clinics on Mondays, Wednesdays, and Saturdays at 11:30 A.M.

Dermatology and Syphilology. Instruction is offered each quarter to Senior students consisting of lectures, seminars, and study and treatment of patients.

Neurology. An elective course consisting of bedside teaching in clinical neurology is offered for three quarters to Senior students. The Laboratory of Experimental Neurology is available for postgraduate investigative work; this laboratory handles routinely the neurosurgical biopsy material including intracranial tumors. A three channel electroencephalograph is in routine clinical use and is available for special research problems.

Neuropsychiatry. Instruction is started in the second year with a course that covers psychobiology and general psychopathology, and which serves as a bridge between the student's work in academic psychology and clinical neuropsychiatry. This course is concerned with the modern conception of the personality, its neurophysiological basis, growth and development, and traits, normal and abnormal. The problems of intelligence, intelligence testing, and mental deficiency are discussed. The

students are trained in neuropsychiatric method and examination, and they make a psychiatric or personality make-up examination upon themselves. Instruction in neuropsychiatry for Junior and Senior students is continued by weekly lecture-clinics during the Autumn, Winter, and Spring Quarters. In the Autumn Quarter the emphasis is on neurology; in the Winter and Spring Quarters the clinical study of psychiatry is developed. Mental disorders in general are considered, and the major psychoses are specifically outlined. The didactic work in neuropsychiatry is supplemented by clinics and by the student's actual experience in handling such psychiatric problems as occur on the wards and in the Public Dispensary of the Hospital. The problems of the psychoneuroses, psychotherapy, and mental hygiene are emphasized. In addition, clinics are held in the North Carolina State Hospital, Raleigh, N. C. Special and elective work in psychiatry is offered to students who are especially interested. Before graduation, it is sought to give the student a workable conception of the individual as a whole, the psychobiological unit, that may be applied in practice.

Surgery

DERYL HART, *Professor of Surgery.*

C. E. GARDNER, JR., *Associate Professor of Surgery.*

R. R. JONES, JR., *Assistant Professor of Surgery.*

J. W. BEARD, *Assistant Professor of Surgery in Charge of Experimental Surgery.*

E. P. ALYEA, *Associate Professor of Surgery in Charge of Urology.*

W. B. ANDERSON, *Associate Professor of Surgery in Charge of Ophthalmology.*

W. W. EAGLE, *Associate Professor of Surgery in Charge of Otolaryngology.*

*A. R. SHANDS, JR., *Associate Professor of Surgery in Charge of Orthopaedics.*

BARNES WOODHALL, *Assistant Professor of Surgery in Charge of Neurosurgery.*

HAROLD FINKELSTEIN, *Assistant Professor of Surgery.*

L. D. BAKER, *Associate in Orthopaedics.*

R. B. RANEY, *Associate in Orthopaedics.*

A. R. TAYLOR, *Research Associate in Surgery and Biochemistry.*

W. R. BRYAN, *Research Associate in Experimental Surgery.*

R. V. FLETCHER, *Instructor in Surgery.*

S. E. UPCHURCH, *Instructor in Surgery.*

C. H. WATERS, *Instructor in Orthopaedics.*

J. E. DEES, *Instructor in Urology.*

L. C. ROBERTS, *Instructor in Urology.*

W. D. FARMER, *Instructor in Otolaryngology.*

MILO FRITZ, *Instructor in Otolaryngology.*

G. B. FERGUSON, *Instructor in Bronchoscopy.*

T. W. ATWOOD, *Instructor in Dentistry.*

N. F. ROSS, *Instructor in Dentistry.*

W. H. BRIDGERS, *Assistant in Surgery.*

W. F. HOLLISTER, *Assistant in Surgery.*

D. L. LOVELL, *Assistant in Surgery.*

W. H. PETTUS, *Assistant in Surgery.*

R. B. RAY, *Assistant in Surgery and in Anatomy.*

W. C. SEALY, *Assistant in Surgery.*

W. L. WELLS, *Assistant in Surgery.*

DOROTHY W. BEARD, *Research Assistant in Experimental Surgery.*

CHRISTOPHER STUART, *Assistant in Urology.*

* On leave, 1937.—

R. A. ARNOLD, *Assistant in Otolaryngology.*

R. C. FUGATE, *Assistant in Otolaryngology.*

General Surgery. In the Spring Quarter the second-year students, during their course in physical diagnosis, attend clinics and demonstrations arranged to familiarize them with the techniques of examinations and the diagnostic procedures used in general surgery and the surgical specialties. Emphasis is placed on the more practical and commonly used methods.

During the Autumn, Winter, Spring, and Summer Quarters, at 11:30 A.M. on Tuesdays and Fridays, and during the Autumn, Winter, and Spring Quarters at 9:30 A.M. on Saturdays, clinics in surgery and the surgical specialties are held for Junior and Senior students. The Junior students, during their surgical quarter, attend ward rounds in surgery from 8:30 to 10:30 A.M., on Mondays, Wednesdays, and Fridays, act as clinical clerks on the wards, avail themselves of the electives offered and attend the regular clinics. The surgical group in the Senior year attends ward rounds from 8:30 to 10:30 A.M. on Mondays, Wednesdays, and Fridays, the regular clinics and the electives offered, and assists in the surgical dispensary in the afternoons. Individuals may take any of the electives offered.

An *elective* course in operative surgery is given in the experimental laboratory during the Autumn and Spring Quarters. This course is scheduled from 8:30 to 11:30 A.M. on Tuesdays and Thursdays. The group is divided into operating teams, and each student takes his turn serving as the operator, first assistant, and anesthetist. During the Winter Quarter special work in experimental surgery may be arranged by conference with the instructor. The purpose of this course is to teach the basic principles of aseptic surgery as well as of anesthesia. Incidentally the student performs a number of operations illustrating various types of surgery, the operative procedures being of gradually increasing difficulty.

An *elective* course in emergency and traumatic surgery is given each quarter. In groups of two, each week, Junior or Senior students are on call in the emergency room for all accidents and emergencies. Opportunity is given to observe and assist in the treatment of accident cases and in the diagnosis of acute abdominal emergencies. Lectures, twice each week, during the Winter Quarter, supplement this course.

An *elective* course in anesthesia is open to four properly qualified Senior students, each quarter. Students meet the anesthetist each morning in the operating room and observe and administer anesthetics under supervision.

Ophthalmological Division. During the Spring Quarter second-year students receive instruction in elementary ophthalmology. During the Junior obstetrical quarter the students are assigned to the ophthalmological clinic on Tuesday and Friday afternoons for five and one-half weeks, and assist in the study and treatment of eye diseases. Especial emphasis is placed on the underlying medical and surgical conditions. Each student follows throughout his time in the clinic all patients assigned to him.

For those who manifest an unusual interest in this specialty, provision will be made for more advanced work. An elective course in diseases of the eye, including refraction and the use of diagnostic instruments, is given each quarter on Thursday morning along with a similar elective in otolaryngology.

Orthopaedic Division. In the Spring Quarter of the second year an introductory course in orthopaedics is given. During the surgical quarters the Junior and Senior students attend ward rounds at 8:30 A.M. on Monday. Clinics are held during the Autumn Quarter on Friday at 11:30 A.M. for Juniors and Seniors. Students in their Senior Surgical Quarter are assigned in rotation to the orthopaedic dispensary which is held each afternoon from Monday to Friday inclusive. Special work may be arranged for students who wish to do research or experimental work. At 813 Fifth Street, the orthopaedic department conducts a special clinic for the treatment of cerebral palsy. The clinic has a bed capacity of twelve and is staffed with a specially trained physiotherapist, a schoolteacher, and an administrative officer. Interested students are welcomed at any time. An elective course in orthopaedic pathology is offered for one hour per week during the Winter Quarter for Juniors and Seniors. During the surgical quarters the Junior and Senior students attend fracture ward rounds at 8:30 A.M. on Friday. An elective course in the treatment of fractures is offered during the Junior and Senior surgical quarters on Friday morning from 9:30 to 11:30. In this course the students get practical training in the application of plaster-of-Paris cast and in the follow-up treatment of fractures. Students are given the opportunity of attending the North Carolina Orthopaedic Hospital Clinic at Goldsboro the third Thursday of each month. They may also attend similar clinics held in Lumberton the first Friday of each month and at Elizabeth City the last Tuesday of each month and in Tarboro the Monday before the last Tuesday of each month.

Otolaryngological Division. An introductory course of instruction in the use of otolaryngological instruments, with a review of normal anatomy, is given to second-year students in the Spring Quarter. Clinics on Fridays at 11:30 A.M. during the Spring Quarter are given to Junior and Senior students. Junior students during their obstetrical quarter spend two afternoons for five and one-half weeks in the otolaryngological dispensary. There are no formal teaching otolaryngological ward rounds, but Junior and Senior students are assigned to patients during the surgical quarter. Individual instruction is given the student by the various members of the Staff. An *elective* course on the anatomy, physiology, and disease of the ear, nose, and throat has been arranged for those desiring it. An *elective* course on diseases of the ear, nose, and throat, including X-ray interpretation and the use of diagnostic instruments is given on Thursday morning of each quarter along with a similar elective in ophthalmology.

Urologic Division. In the Spring Quarter, second-year students are given a course of lectures and practical demonstrations in urological

physical diagnosis in the normal individual. Ward rounds on urological patients are given every Saturday at 8:30 A.M., throughout the year, which Junior students in their surgical quarter, and the Senior surgical group are required to attend. During each quarter, small groups are selected from the Senior surgical group of students and assigned in rotation to the urological dispensary every afternoon. Here, under proper supervision, they study patients and give recommended treatment. During one and a third quarters of the year urological lectures are given on Fridays at 11:30 A.M. for the Junior and Senior classes. These lectures deal with the affections of the male and female urinary tract and of the male genital tract. Clinics for urethroscopic and cystoscopic investigation and the more technical methods of urological diagnosis and treatment are held Monday, Wednesday, and Thursday from 1:30 to 5:00 P.M. and Tuesdays and Thursdays from 9:30 A.M. to 12:30 P.M., and from 1:00 to 5:00 P.M. throughout the year. X-ray conferences on all urological cases are held Tuesday, Thursday, and Saturday mornings from 8:30 to 9:30 and are followed by Staff rounds. Three Senior students may select one of these cystoscopic clinics, X-ray conferences, and Staff rounds as an elective. *The Urologic Journal Club* meets each Monday from five to six-thirty o'clock, and members of the Staff review their respectively assigned journals. Interested students are welcomed.

Neuro-surgical Division. During the Autumn, Winter, Spring, and Summer Quarters, at 11:30 A.M., on every third Tuesday, neuro-surgical amphitheater clinics are held for Junior and Senior students. In these clinics, the general principles of neuro-surgical diagnosis and treatment are discussed. During all four quarters, weekly ward rounds are held at 8:30 A.M. on Wednesdays for the surgical group in the Senior year. Emphasis is placed in these smaller clinics upon the recognition of neuro-surgical problems, followed by observation of the operating and post-operative procedures. Weekly X-ray and pathological conferences are held which may be attended by interested individuals.

The *Tumor Clinic* of the Duke Hospital was organized in 1935 for the study and student teaching of malignant disease. It is staffed by a surgeon, radiologist, and pathologist, who attend all clinics, and consultants in the various specialties are on the consulting staff to be called when a patient with a malignant tumor in their field is registered in the clinic. Students in their fourth-year surgical quarter see all cases registered in the clinic and work them up and have available for teaching not only the clinical background of the Staff but also pathological sections of tumors under the study of the pathologists. From August, 1937, to August, 1938, there were 720 old patients and 455 new patients seen in the Tumor Clinic.

Dentistry. Second-year students, in the Spring Quarter, are instructed in the principles of dentistry.

Roentgenology

R. J. REEVES, *Associate Professor of Radiology.*

W. S. WALLACE, *Instructor in Radiology.*

J. E. MORGAN, *Instructor in Roentgenology and Physiology.*

F. K. HURT, *Instructor in Roentgenology.*

P. B. PARSONS, *Instructor in Radiology.*

G. J. BAYLIN, *Assistant in Roentgenology and Instructor in Anatomy.*

A course with especial reference to differential diagnosis and X-ray and radium therapy is given during the Senior surgical quarter. Instruction in radium and X-ray therapy is given the Senior students each quarter in the tumor clinic.

An elective course in X-ray differential diagnosis is given to a limited number of students each quarter.

Obstetrics and Gynecology

BAYARD CARTER, *Professor of Obstetrics and Gynecology.*

E. C. HAMBLIN, *Associate Professor of Obstetrics and Gynecology, and Endocrinologist.*

R. A. ROSS, *Associate Professor of Obstetrics and Gynecology.*

W. L. THOMAS, JR., *Assistant Professor of Obstetrics and Gynecology.*

W. Z. BRADFORD, *Assistant Professor, and Director, Charlotte Maternity Clinic.*

E. M. RUCKER, *Instructor in Obstetrics and Gynecology.*

ELEANOR B. EASLEY, *Assistant in Obstetrics and Gynecology.*

T. F. ADKINS, *Assistant in Obstetrics and Gynecology.*

C. J. PATTEE, *Clinical Fellow, Endocrine Division, Obstetrics and Gynecology.*

G. J. AXELSON, *Assistant in Endocrine Division, Obstetrics and Gynecology.*

W. KENNETH CUYLER, *Research Fellow, Endocrine Division, Obstetrics and Gynecology.*

C. P. JONES, *Bacteriologist in Obstetrics and Gynecology.*

Second-year students receive seventeen hours of instruction in the fundamentals of obstetrics and gynecology during their course in physical diagnosis in the Spring Quarter. Clinics and demonstrations for Junior and Senior students are held on Saturdays at 10:30 A.M. during the Autumn, Winter, and Spring Quarters and on Mondays at 11:30 A.M. in the Summer Quarters. During one quarter of the Junior year each group of students attends ward rounds at 8:30 A.M. on Mondays, Wednesdays, and Saturdays, and the Public Dispensary at 1:30 P.M. three times weekly, except Saturdays, Sundays, and holidays for eleven weeks. They also attend an endocrine clinic once a week for eleven weeks during the Junior year. The students also spend part of each day on the wards. Senior students, during their surgical quarter, have ward rounds on obstetrics and gynecology on Saturdays at 8:30 A.M. Each Senior student, during his specialties quarter, is required to spend two weeks on service with the Outside Obstetrics Training Group at Charlotte, N. C. This group is active in the antepartum care, in the delivery of the patients, and in the postpartum care of patients registered by the Maternity Clinic of that city. The group is under the direction of a trained obstetrician.

Elective courses in the diagnosis and treatment of obstetrics and gynecologic conditions are offered for Junior and Senior students.

Pediatrics

W. C. DAVISON, *Professor of Pediatrics.*

ANGUS MCBRYDE, *Assistant Professor of Pediatrics.*

J. M. ARENA, *Assistant Professor of Pediatrics.*

J. S. HARRIS, *Associate in Pediatrics and Biochemistry.*
A. H. LONDON, *Instructor in Pediatrics.*
S. C. DEES, *Instructor in Pediatrics.*
D. W. MARTIN, *Instructor in Pediatrics.*
L. E. ROSS, *Assistant in Pediatrics.*
MILDRED M. SHERWOOD, *Supervisor in Pediatric Nursing.*

Each *second-year* student receives nine hours of instruction in elementary pediatrics during the course in physical diagnosis in the Spring Quarter. *Junior* and *Senior* students, during their medical quarters, have pediatric ward rounds on Saturdays from 8:30 to 9:30 A.M. The *Senior* students are divided into three groups, each of which spends one quarter in pediatrics. During this quarter, they are assigned daily as clinical clerks on the children's ward, nursery and pediatric dispensary, attend ward rounds, at 8:30 A.M. on Mondays, Wednesdays, and Fridays, are instructed in the practical nursing of infants by Miss Sherwood on Mondays and Wednesdays at 10:30 A.M., assist in the treatment of pediatric patients in the syphilis clinic on Thursdays at 9:00 A.M., and are taught the preparation of diets for infants and children by the Professor of Dietetics. Each student attends six infant feeding clinics during this quarter. On Thursdays at 11:30 A.M., the *Junior* and *Senior* students attend demonstrations at which the preclinical basis, as well as the clinical aspects, of disease are emphasized. *Elective courses: Senior students* may attend the feeding clinic on Tuesdays at 9:00 A.M., do research work, or assist in pediatric ward or dispensary one or more mornings per week, according to the time at their disposal.

Legal Medicine and Toxicology

J. B. BRADWAY, *Professor of Law.*
T. D. BRYSON, *Professor of Law.*
W. D. FORBUS, *Professor of Pathology.*
D. T. SMITH, *Professor of Bacteriology and Associate Professor of Medicine.*
H. M. TAYLOR, *Associate Professor of Biochemistry and Toxicology.*

This course embraces a discussion of the relation of physicians to legal criminal procedures, jurisdiction of the coroner and medical examiner, laws governing the dead human body, personal identity of the living and the dead, the legal autopsy, traumatic injuries and fractures, rape, abortion, asphyxial death, homicidal, suicidal, and industrial poisoning, alcoholism, the examination of blood, stains, fibers, and the detection of malingering. The course is open to students in the seventh to twelfth quarters and is given in alternate years. To be given in 1939-40. Discussions of medico-legal problems for the House Staff and *Senior* students, and joint conferences of the medical and law students also are held.

Preventive Medicine and Public Health

H. W. BROWN, *Professor of Preventive Medicine and Public Health.*
H. G. BAITY, *Lecturer in Public Health.*
M. J. ROSENAU, *Lecturer in Preventive Medicine and Public Health.*
J. W. R. NORTON, *Lecturer in Preventive Medicine and Public Health.*
J. H. EPPERSON, *Instructor in Preventive Medicine and Public Health.*

H. B. GOTAAS, *Instructor in Public Health.*

W. P. RICHARDSON, *Instructor in Preventive Medicine and Public Health.*

Public Health and Hygiene. A lecture course designed to acquaint second-year students with general environmental sanitation including sewage disposal, water supplies, milk and food for rural and urban communities. Vital statistics, public health regulations, and various official public health organizations are discussed. Exercises in the epidemiology of several diseases are introduced to give the student a broad view of disease and its prevention. *Field Demonstrations.* Visits for observation and instruction are made to state, county, and city health departments, infant and school hygiene clinics, dairies, public water supplies, sewage disposal plants and industrial establishments. Seminars are held in which the students discuss the various problems encountered in their field experience. *Preventive Medicine.* A series of lectures and exercises intended to provide Senior students with the preventive point of view in the practice of medicine. The etiology, modes of transmission, epidemiology, and the prevention of communicable diseases are discussed. The problems of infant and maternal hygiene, occupational diseases, and the deficiency diseases are considered. Emphasis is placed upon the relationship of the private practitioner of medicine to the public health program. *A Laboratory Course* is given in the Autumn Quarter of the second year by the Department of Bacteriology, and consists of the identification and virulence testing of diphtheria cultures, the isolation of stool, throat and blood organisms, the practical examination of water, Schick, Dick and tuberculin tests, and vaccination against typhoid and smallpox. *Elective:* Through the co-operation of several city and county health officers, students may spend one or more weeks in observing and assisting in the operation of these public health units.

CURRICULUM OF THE SCHOOL OF MEDICINE

The usual four medical school years of thirty-three weeks each may be condensed into three and one quarter calendar years. In the preclinical subjects three terms, and in the clinical subjects four terms, each of eleven weeks, are given during the year, and a certificate is granted after the satisfactory completion of twelve terms. These may be taken consecutively (certificate in three and one quarter years) if the student's previous work has been outstanding and if he has been given permission by the Curriculum Committee; or three terms may be taken each year (certificate in four years). Such a curriculum will affect in no way the course at any other medical school. If students who have received their first two years of training at other medical schools wish to spend their clinical years at the Duke University School of Medicine, they are eligible in October for the seventh quarter, which corresponds to the beginning of the usual Junior Class (see page 34).

Every effort is made to emphasize the close relationship of preclinical and clinical instruction. Members of the Clinical Staff assist in the teaching of preclinical subjects and demonstrate, to the students of the first

two years, patients whose conditions illustrate the subjects being taught. Thus, from the student's first days, he is impressed with the interdependence of all branches of the medical science. During the sixth quarter every department of the School participates in a correlation course, which combined with the teaching of physical diagnosis, serves to give the student just entering his clinical years a co-ordinated introduction to medicine in all its aspects. From the seventh to twelfth quarters, pre-clinical instructors assist the Clinical Staff in presenting the underlying basis of disease.

Eighteen per cent of the time in this curriculum is free for elective work or anything else which the student wishes to do. No credits are given for specific courses during this free time. The opportunity merely is provided for each student, on his own initiative, to obtain the additional training which he may feel to be necessary or desirable. It is hoped that many of the students will migrate to other medical schools in this country or abroad for one quarter, a practice which is encouraged. The students also may utilize their free time in elective courses in pre-clinical and clinical departments and may pursue independent work in any subject or may do research work. The elective courses have been organized for small groups and will be repeated, if necessary, in one or more quarters. Students who wish to study during the Summer Quarter, either here or elsewhere, to spend one or more quarters at other medical schools or to substitute a program different from that listed below, must obtain permission, in advance, from the Curriculum Committee.

CURRICULUM OF FOUR QUARTERS OF ELEVEN WEEKS EACH

(The hours for these courses will be posted on the bulletin board.)

FIRST YEAR

AUTUMN QUARTER (1st):

September 28 to December 16, 1939.

Anatomy (including histology and neuro-anatomy)	385 Hours
Biochemistry	18 Hours
Free time	26 Hours

WINTER QUARTER (2d):

January 2 to March 16, 1940.

Anatomy (including histology and neuro-anatomy)	165 Hours
Biochemistry	176 Hours
Free time	88 Hours

SPRING QUARTER (3d):

March 26 to June 8, 1940.

Physiology and pharmacology, including nutrition	330 Hours
Free time	99 Hours

SECOND YEAR

AUTUMN QUARTER (4th):

September 28 to December 16, 1939.

Pathology	198 Hours
Bacteriology and Parasitology	150 Hours
Introduction to Psychiatry	11 Hours
Free time	70 Hours

WINTER QUARTER (5th) :

January 2 to March 16, 1940.

Pathology	183	Hours
Clinical microscopy	110	Hours
Public health and hygiene	37	Hours
Free time	99	Hours

SPRING QUARTER (6th) :

March 26 to June 8, 1940.

Physical diagnosis and introduction to clinical medicine	300	Hours
Free time	129	Hours

JUNIOR YEAR

SUMMER QUARTER (7th) :*
June 17 to August 31, 1940.

Medicine (Junior)	385	Hours
Free time	44	Hours

AUTUMN QUARTER (8th) :*
September 28 to December 16, 1939.

Surgery (Junior)	418	Hours
Free time	11	Hours

WINTER QUARTER (9th) :*
January 2 to March 16, 1940.

Obstetrics and gynecology (Junior)	220	Hours
Ophthalmology and Otolaryngology	66	Hours
Free time	143	Hours

SENIOR YEAR

SPRING QUARTER (10th) :*
March 26 to June 8, 1940.

Medicine (Senior)	390	Hours
Free time	39	Hours

SUMMER QUARTER (11th) :*
June 17 to August 31, 1940.

Surgery (Senior) including Urology and Orthopaedics	309	Hours
Obstetrics	120	Hours

AUTUMN QUARTER (12th) :*
September 28 to December 16, 1939.

Pediatrics	191	Hours
Medicine	82	Hours
Final clinical examinations	24	Hours
Preventive medicine	22	Hours
Free time	110	Hours

SUMMARY

Total number of hours required instruction, (83%)	4,290
Total number of hours of free time, (17%)	858
Total number of hours in curriculum, (100%)	5,148

* The clinical instruction is repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth, and ninth quarters, and also the order of the tenth, eleventh, and twelfth quarters. Students who do not attend the Summer Quarters, have similar instruction one quarter later. The above schedule merely illustrates the program of one group.

FEES AND EXPENSES

All fees for each quarter are due and payable at the beginning of each quarter, and no student will be admitted to classes until these fees have been paid at the University Treasurer's Office. A fine of \$5.00 is charged for late registration. No credit will be given for any quarter in which the tuition of \$150 has not been paid at the Treasurer's Office, whether the work has been done here or elsewhere, except: (1) students who have been given permission by the Curriculum Committee to spend a quarter at a European medical school or hospital will have their tuition of \$150 for that quarter remitted and (2) students who have been permitted by the Curriculum Committee to spend a quarter at another American medical school or hospital may subtract the amount of tuition paid at this other medical school or hospital from the \$150 due here for that quarter.

It is not advisable for a student to attempt outside work to defray his expenses; the results usually are disastrous to his health and academic standing.

Fees and Expenses

Tuition, per quarter	\$150
Health Fee, per quarter	3.33
Athletic Fee, admitting students to all athletic contests held on the University campus during the quarter	5
Room-rent, per quarter* (estimated)	50
Board, per quarter (estimated)	75
Laundry, per quarter (estimated)	10 to 20
Books, per quarter (estimated)	25 to 50
Commencement and Diploma Fees**	8
National Board of Medical Examiners Fees** 25 (Part I), 20 (Part II)	
Microscope, ophthalmoscope, otoscope and other equipment, which are required of each student and which must conform to rigid standards, may be obtained on a rental basis from the University	20 to 30
Estimated total expenses, per month	115 to 150

ANGIER B. DUKE MEMORIAL AND OTHER LOAN FUNDS

The Angier B. Duke Memorial, Incorporated, administers through an advisory committee of the officers of the University a loan fund for students. In addition, the University administers other endowed loan funds for the benefit of students who are not financially able to meet their expenses. Medical students, after their third quarter, are eligible for loans from these sources. No scholarships are awarded in the School of

* Rooms may be reserved by medical students in Few Quadrangle. These rooms are provided with furniture, heat, electric light, and care of rooms; each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows. Applications for rooms, accompanied by a reservation fee of \$25, should be made before August 1, by writing to Mr. W. E. Whitford, Duke University, Durham, N. C. This fee is deducted from the room charges for the Fall Quarter; it is not refundable unless the request is made before August 1.

** Payable at the beginning of the quarter in which a student is eligible for a degree or examination.

Medicine. The loan funds are administered in accordance with the following regulations:

1. No loan will be made to a student who violates any of the regulations of the University or who is not doing outstanding class work.

2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged not later than one week after the beginning of a quarter.

3. Every applicant for a loan must present with the application such security as the President of the University may approve, and no money will be advanced before a note with approved security is in the hands of the Treasurer of the University.

4. Interest at the rate of 6 per cent annually shall be charged for all loans of money, and the interest must be paid annually.

RESEARCH FELLOWSHIPS

The Lederle Laboratories Research Fellowship, in the Department of Biochemistry, held by Dr. Hans Neurath.

The James A. Greene Brucella Research Fellowship, in the Department of Medicine, held by Dr. Bowman Wise.

The Lederle Fellowship, in the Department of Surgery, held by Dr. Alton R. Taylor.

The National Cancer Institute Fellowship, in the Department of Surgery, held by Dr. W. Ray Bryan.

The Ciba Pharmaceutical Products Research Fellowship in Endocrinology, held by W. Kenneth Cuyler.

The Dorothy Beard Research Fellowship, in Experimental Surgery, held by Dr. D. Gordon Sharp.

The National Cancer Institute Fellowship, in the Department of Pathology, held by Dr. James G. Whildin.

Research Fellowship in Endocrinology, held by Dr. Chauncey J. Pattee.

LIST OF SCHOOL OF MEDICINE STUDENTS

	<i>First-Year</i>	<i>Second-Year</i>	<i>Junior-Senior</i>	<i>Total</i>	<i>Graduates 1932-39</i>
Students	66	67	126	259	316

FIRST-YEAR STUDENTS

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Harry Tompkins Aker.....	Boise, Idaho.....	Duke University, House FF.
Ralph Parr Baker.....	Newberry, N. C.....	1601 University Road, Durham, N. C.
Donald Gibson Bard, Jr.....	Pleasantville, N. Y.....	Duke University, House FF.
John Lee Barrett.....	Grosse Pointe, Mich.....	Duke University, House FF.
Stephen Russell Bartlett, Jr.....	Hingham, Mass.....	Duke University, House FF.
Charles Leonard Benson.....	Tamaqua, Pa.....	Duke University, House FF.
Gustave Francis Bieber.....	South River, N. J...2121 W. Pettigrew St., Rutgers University.	Durham, N. C.
George Orion Boucher.....	Salt Lake City, Utah.....	818 Second St., Durham, N. C.
Norris Mervin Burleson.....	Port Allegany, Pa.....	Duke University, House FF.
John Sinclair Campbell.....	Manistee, Mich.....	Duke University, House FF.
Robert Monroe Campbell.....	Neosho, Mo.....	Duke University, House FF.
Leffie Mahon Carlton, Jr.....	Wauchula, Fla.....	Duke University, House FF.
George Judson Cooper, Jr.....	Detroit, Mich.....	Duke University, House FF.
Archibald Nail Dawson.....	Lakewood, Ohio.....	Duke University Road, Durham, N. C.
Lucy Jane Gregory.....	Rocky Mount, N. C.....	Faculty Apts.-215, Durham, N. C.
Eugene Russell Griffith.....	Crowley, Colo.....	Duke University, House FF.
Matthew Hill Grimmett.....	McMinnville, Tenn.....	Duke University, House FF.
Walter Gordon Hackett.....	Rome, Ga.....	Duke University, House FF.
Harold E. Harvey.....	Sprague, W. Va.....	Duke University, House FF.
Watkins Proctor Harvey.....	Lynchburg, Va.....	1505 University Road, Durham, N. C.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Eleanor Jane Herring;..... <i>Greensboro College;</i> <i>Gulford College.</i>	Roseboro, N. C.....	Faculty Apts.-215, Durham, N. C.
William Samuel Hooten..... <i>Lynchburg College.</i>	Lynchburg, Va.....	1505 University Road, Durham, N. C.
Henry Lee Howard..... <i>Duke University;</i> <i>University of South Carolina.</i>	Savannah, Ga.....	Duke University, House FF.
John Howard..... <i>Duke University.</i>	Savannah, Ga.....	Duke University, House FF.
Carter Wyckoff Howell..... <i>Harvard University;</i> <i>Knox College.</i>	Grinnell, Iowa.....	Duke University, House FF.
Roy Mason Kash..... <i>Sterling College.</i>	Omer, Ky.....	Duke University, House FF.
Anthony Vanderbilt Keese..... <i>Stanford University.</i>	Pasadena, Calif.....	Duke University, House FF.
Andrew Antonious Kerhulas..... <i>Wofford College.</i>	Union, S. C.....	Duke University, House FF.
Samuel Rea Kilgore..... <i>The Citadel.</i>	Woodruff, S. C.....	1017 Rose Hill Ave., Durham, N. C.
Herbert Arthur King..... <i>University of Richmond.</i>	Peabody, Mass.....	Duke University, House FF.
John Albert Kneipp..... <i>Duke University.</i>	Washington, D. C.....	Duke University, House FF.
Lemuel Weyher Kornegay, Jr.... <i>Davidson College.</i>	Rocky Mount, N. C.....	Duke University, House FF.
David Jay McCulloch..... <i>Ohio State University.</i>	East Liverpool, Ohio.....	Duke University, House FF.
Paul Robinson Massengill..... <i>Duke University;</i> <i>N. C. State College.</i>	Raleigh, N. C.....	909 Arnette Ave., Durham, N. C.
Harry Stoll Mustard, Jr..... <i>The Johns Hopkins University;</i> <i>University of South Carolina.</i>	Boykin, S. C.....	University Apts., Durham, N. C.
Beatrice Hart Nabigian..... <i>Swarthmore College;</i> <i>University of Edinburgh.</i>	Durham, N. C.....	Few Farm, Durham, N. C.
Jack Harrell Neese..... <i>Elon College.</i>	Reidsville, N. C.....	Erwin Road, Durham, N. C.
William Irvin Niekirk..... <i>Duke University.</i>	Hagerstown, Md.....	Duke University, House FF.
John Hopkins Noel, Jr..... <i>Vanderbilt University.</i>	Nashville, Tenn.....	Duke University, House FF.
Arthur Francis O'Keeffe..... <i>The Johns Hopkins University.</i>	Milton, Mass.....	University Apts., Durham, N. C.
John Frederick Ott..... <i>University of Cincinnati.</i>	Cincinnati, Ohio.....	Duke University, House FF.
John Dickinson Peck, Jr..... <i>Virginia Polytechnic Institute.</i>	Summersville, W. Va.....	Duke University, House FF.
Maxine Roberta Perdue..... <i>Duke University.</i>	Canton, Ohio.....	Faculty Apts.-115, Durham, N. C.
William Anthony Peters, Jr..... <i>Duke University.</i>	Elizabeth City, N. C.....	Duke University, House FF.
Robert Lyons Picken..... <i>Washington State College.</i>	Tonasket, Wash.....	808 Third St., Durham, N. C.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Frank Earl Poole..... <i>West Virginia University.</i>	Clay, W. Va.....	Duke University, House FF.
Norman Wesley Rausch..... <i>Western Maryland College; Duke University.</i>	Maplewood, N. J.....	Duke University, House FF.
John Andrews Ritchie..... <i>Hampden-Sydney College; University of Virginia.</i>	Hardware, Va.....	Duke University, House GG.
Benjamin Franklin Roach..... <i>Duke University.</i>	Midway, Ky.....	Duke University, House FF.
Harold Francis Roma..... <i>St. John's Univ. Coll. of Pharmacy; Manhattan College.</i>	Brooklyn, N. Y.....	Duke University, House FF.
Robert Franklin Ruff..... <i>Pennsylvania State College.</i>	Jeannette, Pa.....	Duke University, House FF.
John Greateon Sellers..... <i>William and Mary College; Duke University.</i>	Norfolk, Va.....	Duke University, House FF.
Alfred Siegel..... <i>College of the City of New York; Washington Square College.</i>	Brooklyn, N. Y.....	Duke University, House FF.
Richard Hopkins Sinden..... <i>University of Florida.</i>	Dunedin, Fla.....	Duke University, House FF.
Walter Spaeth, Jr..... <i>Duke University.</i>	Southern Pines, N. C....	Duke University, House FF.
Harlan Aljean Stiles..... <i>Marshall College.</i>	Huntington, W. Va.....	Duke University, House FF.
Eric Donald Thompson..... <i>Duke University; Harvard College.</i>	Montclair, N. J.....	Duke University, House FF.
Kearns Reid Thompson, Jr..... <i>Duke University.</i>	Reidsville, N. C.....	Duke University, House FF.
Thomas Carter Van Arsdall..... <i>University of Michigan.</i>	Harrodsburg, Ky.....	Duke University, House FF.
Robert James Vanderlinde..... <i>Duke University.</i>	Rochester, N. Y.....	Duke University, House FF.
James Ernest Wallace..... <i>Mercer University.</i>	Oil City, Pa.....	Duke University, House FF.
Garland Odell Wellman..... <i>Marshall College.</i>	Kenova, W. Va.....	Duke University, House FF.
William Harrison Williams, Jr.. <i>Wake Forest College.</i>	Charlotte, N. C.....	Duke University, House FF.
John McLean Wilson..... <i>The Citadel.</i>	Darlington, S. C.....	1017 Rose Hill Ave., Durham, N. C.
Marshall Wayne Woodard..... <i>Mars Hill College; Duke University.</i>	Asheville, N. C.....	Duke University, House FF.
Cabell Young, Jr..... <i>N. C. State College; Duke University.</i>	Charlotte, N. C.....	Duke University,

SECOND-YEAR STUDENTS

William Edwin Baldwin, Jr..... <i>Duke University; S. S. Wake Forest College.</i>	Dunn, N. C.....	1013 Monmouth Ave., Durham, N. C.
Boyd Black..... <i>Waynesburg College.</i>	Mather, Pa.....	Duke University, House FF.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Albert Henry Bremer, Jr..... <i>University of Virginia.</i>	Rochelle Park, N. J.....	Duke University, House FF.
Clyde Owens Brindley..... <i>University of Texas.</i>	Temple, Texas.....	Duke University, House GG.
Iverson Oakley Brownell..... <i>Washington State College.</i>	Pasco, Wash.....	University Apts., Durham, N. C.
Walter Ellis Bryant..... <i>College of Charleston; Newberry College.</i>	Darlington, S. C.....	901 Fifth St., Durham, N. C.
Merwin Elliott Buchwald..... <i>Washington and Lee University.</i>	Brooklyn, N. Y.....	Duke University, House FF.
George William Burch..... <i>University of Florida.</i>	Fort Lauderdale, Fla.....	918 Trinity Ave., Durham, N. C.
Clarence Cooper Butler..... <i>Vanderbilt University.</i>	Columbus, Ga.....	Duke University, House FF.
John Robert Clark, Jr..... <i>Randolph-Macon College.</i>	Stuart, Va.....	Duke University, House FF.
Joseph Henry Cutchin, Jr..... <i>Davidson College.</i>	Whitakers, N. C.....	Duke University, House FF.
Roy David Daniel..... <i>Florida Southern College; University of Florida.</i>	Fort Meyers, Fla.....	Duke University, House FF.
William Arthur Dinsmore..... <i>Pennsylvania State College.</i>	Heilwood, Pa.....	1013 Monmouth Ave., Durham, N. C.
Hartwell Price Edwards..... <i>Wofford College.</i>	Spartanburg, S. C.....	411 Cook Street, Durham, N. C.
John Robert Egan..... <i>Harvard College.</i>	Washington, D. C.....	Duke University, House FF.
John Mellichamp Fearing..... <i>College of Charleston; University of North Carolina.</i>	Charleston, S. C.....	University Apts., Durham, N. C.
Arthur Howard Flower, Jr..... <i>Heidelberg College.</i>	Dayton, Ohio.....	Duke University, House FF.
Joseph Armistead Ford, Jr..... <i>Lynchburg College; Virginia Military Institute.</i>	Lynchburg, Va.....	901 Fifth St., Durham, N. C.
Elmer Thomas Gale..... <i>Duke University.</i>	Clinton, N. C.....	Duke University, House FF.
Joe Frank Harris..... <i>Duke University.</i>	Raleigh, N. C.....	Duke University, House FF.
John Roy Hege, Jr..... <i>Salem College; Duke University.</i>	Winston-Salem, N. C.....	Duke University, House FF.
Stephen Francis Horne..... <i>Duke University.</i>	Farmington, N. C.....	Duke University, House FF.
Frank Randolph Johnston..... <i>Presbyterian College.</i>	Greer, S. C.....	411 Cook St., Durham, N. C.
Herbert David Kerman..... <i>Duke University.</i>	West Palm Beach, Fla.....	Duke University, House FF.
Charles Edward Kernodle, Jr.... <i>Elon College.</i>	Elon College, N. C.....	Duke University, House FF.
John Franklin Kincaid..... <i>Hampden-Sydney College.</i>	Leesburg, Va.....	Duke University, House FF.
Chester Sedgewick Koop..... <i>Duke University.</i>	Islip, N. Y.....	Duke University, House HH.
Frank R. Ledesma-Diaz..... <i>The Catholic University of America.</i>	San Juan, Puerto Rico....	Duke University, House FF.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Julian Carr Lentz, Jr..... <i>Duke University.</i>	Durham, N. C.....	1006 Lamond Ave., Durham, N. C.
James William Littler..... <i>Duke University.</i>	Manlius, N. Y.....	411 Cook St., Durham, N. C.
William Campbell McLain, Jr... <i>Duke University;</i> <i>University of South Carolina.</i>	Columbia, S. C.....	1013 Monmouth Ave., Durham, N. C.
I. William McLean, Jr..... <i>Davidson College.</i>	Kingston, Jamaica, B.W.I..	University Apts., Durham, N. C.
Theo Howell Mees..... <i>Capital University;</i> <i>S. S., University of Maryland.</i>	Chevy Chase, D. C.....	University Apts., Durham, N. C.
David DeLeon Moise..... <i>University of Maryland;</i> <i>Duke University.</i>	Sumter, S. C.....	Duke University, House FF.
Frank Theodore Moran..... <i>Rutgers University;</i> <i>Vanderbilt University.</i>	Jersey City, N. J.....	Duke University, House FF.
William Reynolds Nesbitt, Jr..... <i>Williams Junior College;</i> <i>Duke University.</i>	Durham, N. C.....	2403 Club Blvd., Durham, N. C.
Earl Andrew O'Neill..... <i>Springfield College.</i>	Elizabeth, N. J.....	Duke University, House FF.
Charles Hamilton Reid, Jr..... <i>Salem College;</i> <i>University of North Carolina.</i>	Winston-Salem, N. C....	Duke University, House FF.
Frank Newell Reimer..... <i>Long Beach Junior College;</i> <i>Stanford University.</i>	Long Beach, Calif.....	Duke University, House FF.
James Franklin Reinhardt..... <i>Davidson College.</i>	Lincolnton, N. C.....	University Apts., Durham, N. C.
Robert Alfred Greer Ricketson... <i>Vanderbilt University.</i>	Broxton, Ga.....	University Apts., Durham, N. C.
Luther John Roberts, Jr..... <i>Georgia Military Academy;</i> <i>Washington and Lee University.</i>	Newnan, Ga....	1507 Duke University Road, Durham, N. C.
James Forbes Rogers..... <i>Duke University.</i>	Upper Montclair, N. J....	Duke University, House FF.
Max Pritchard Rogers..... <i>High Point College.</i>	Burlington, N. C.....	Duke University, House FF.
Brita Rosenqvist..... <i>University of Pittsburgh.</i>	Oakmont, Pa.....	903 Sixth St., Durham, N. C.
William Crenshaw Smith..... <i>Randolph-Macon College.</i>	Creeds, Va.....	Duke University, House FF.
Richard Dean Snipes..... <i>University of North Carolina.</i>	Hamlet, N. C.....	Duke University, House FF.
Helen Starke..... <i>Duke University.</i>	Ridgewood, N. J.....	903 Sixth St., Durham, N. C.
John Thomas Stone..... <i>The Citadel.</i>	Greenwood, S. C.....	Duke University, House FF.
William Conrad Stone..... <i>Hampden-Sydney College.</i>	Roanoke, Va.....	Duke University, House FF.
John Mather Street..... <i>Yale University.</i>	Manzanillo, Cuba.....	918 Trinity Ave., Durham, N. C.
Archie Reid Sutherland..... <i>Duke University;</i> <i>S. S., Emory and Henry College.</i>	Sparta, Ill.....	Duke University, House FF.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
George Foster Sutherland..... <i>Duke University;</i> <i>Duke University Graduate School.</i>	Grundy, Va.....	Duke University, House FF.
Ralph Gordon Templeton..... <i>University of North Carolina.</i>	China Grove, N. C.....	996 Monmouth Ave., Durham, N. C.
Andrew Henry Thomas..... <i>Roanoke College.</i>	New Britain, Conn.....	Duke University, House FF.
Harold Bushman Thurston..... <i>Duke University.</i>	Martinsburg, W. Va.....	Duke University, House FF.
Henry Lewis Valk..... <i>University of North Carolina;</i> <i>University of Pennsylvania.</i>	Winston-Salem, N. C.....	Duke University, House FF.
Harvey Noble Vandegrift, Jr..... <i>University of Delaware.</i>	Elmhurst, Del.....	1000 Lamond Ave., Durham, N. C.
Harold Diederich von Glahn..... <i>Duke University.</i>	Brooklyn, N. Y.....	Duke University, House FF.
Louis Charles Waller..... <i>Pennsylvania State College.</i>	Nanticoke, Pa...1505	Duke University Road, Durham, N. C.
Theodore Willard Weeks, Jr.... <i>University of Florida.</i>	Moore Haven, Fla.....	Duke University, House GG.
Walter F. Whitt, Jr..... <i>Catawba College.</i>	Salisbury, N. C.....	Duke University, House FF.
Thomas Wilfred Wills..... <i>Harvard University;</i> <i>Stanford University.</i>	San Diego, Calif.....	University Apts., Durham, N. C.
Charles Kenneth Wintrup..... <i>University of Pennsylvania;</i> <i>University of Delaware.</i>	Wilmington, Del.....	1000 Lamond Ave., Durham, N. C.
Harry Clyde Wortman, Jr..... <i>University of Tennessee.</i>	Belleville, N. J.....	Duke University, House GG.
William Armand Wulfman..... <i>Marshall College.</i>	Huntington, W. Va.....	Duke University, House FF.
William Vernon Young..... <i>Maryville College.</i>	Washington, N. J.....	Duke University, House FF.

JUNIOR-SENIOR STUDENTS

Ellis Wentworth Adams (6/2/41)*.	Ypsilanti, Mich.....	Duke University, House B.
Richard Haight Ames (12/14/40).. <i>Haverford College.</i>	Onancock, Va.....	University Apts., Durham, N. C.
Norman LaRue Anderson (12/16/39)..... <i>Duke University.</i>	Durham, N. C.....	Duke Hospital.
Frederick Henry Andrus (12/16/39)..... <i>Akron University;</i> <i>Duke University.</i>	Durham, N. C.....	Duke University, House FF.
Kenward Oliver Babcock (12/14/40)..... <i>San Mateo Junior College;</i> <i>Stanford University.</i>	Ontario, Calif.....	Duke University, House FF.
Waldo Otis Badgley (12/16/39)... <i>General Motors Institute of Technology;</i> <i>Michigan State College.</i>	East Lansing, Mich.....	1005 N. Duke St., Durham, N. C.
Fred Nelson Baeder (6/3/40).... <i>Duke University.</i>	Nutley, N. J.....	Duke University, House GG.

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Gareth Bonsack Barnes (12/14/40) <i>Antioch College;</i> <i>Bridgewater College.</i>	Elgin, Ill.....	Duke University, House GG.
Oliver Jerome Bateman, Jr. (12/16/39).....	Byron, Ga.....	Duke University, House FF.
Ralph Etheridge Baum (6/2/41) ... <i>Duke University.</i>	Kitty Hawk, N. C.....	Duke University, House FF.
Steven I. Bednarz (6/2/41)..... <i>Rutgers University.</i>	Wallington, N. J... 2121 W. Pettigrew St., Durham, N. C.	
Edward Perry Benbow (12/14/40).. <i>Gulford College;</i> <i>University of North Carolina.</i>	Greensboro, N. C.....	Duke University, House FF.
Emil Charles Beyer (6/2/41)..... <i>Duke University.</i>	White Plains, N. Y.....	Duke University, House FF.
William Hegley Bonser (12/16/39)..... <i>Yale University.</i>	Toledo, Ohio.....	2334 Heron Circle, Durham, N. C.
Edwin Wells Brown (6/2/41)..... <i>Biltmore College;</i> <i>Duke University.</i>	Asheville, N. C.....	Duke University, House FF.
Ivan Willard Brown, Jr. (12/16/39)..... <i>University of Rochester.</i>	Newfane, N. Y.....	Duke Hospital.
James Walter Brown, Jr. (12/14/40)..... <i>Duke University.</i>	Gatesville, N. C.... 1515 W. Pettigrew St., Durham, N. C.	
Kenneth Brien Brown (6/2/41) ... <i>Franklin and Marshall College.</i>	Montclair, N. J.....	Duke University, House B.
R. Brown (12/16/39)..... <i>Rollins College.</i>	Beatrice, Neb.....	1119 Eighth St., Durham, N. C.
William Keefer Brumbach (6/2/41)..... <i>Duke University.</i>	Belleville, N. J.....	1022 Gloria Ave., Durham, N. C.
Woodrow William Burgess (6/2/41)..... <i>Duke University.</i>	Royal Oak, Mich.....	Duke University, House FF.
Robert van Liew Campbell (12/16/39)..... <i>University of Maryland.</i>	Hagerstown, Md.....	University Apts., Durham, N. C.
Charles Stafford Clay (6/2/41) ... <i>Duke University;</i> <i>University of Alabama Medical School.</i>	Ashland, Ky.....	Duke University, House FF.
Cecil Curtis Collins, Jr. (3/25/40) <i>Marion Institute;</i> <i>Duke University.</i>	Jacksonville, Fla.....	University Apts., Durham, N. C.
Victor Conforti (6/3/40)..... <i>Connecticut State College.</i>	Torrington, Conn.....	116 Buchanan Road, Durham, N. C.
Joseph Kalil David, Jr. (6/2/41).. <i>University of Florida.</i>	Jacksonville, Fla.....	Duke University, House FF.
J. Harold Donaldson, Jr. (12/14/40)..... <i>Marshall College.</i>	Huntington, W. Va.....	818 Second St., Durham, N. C.

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Frederick Duncan Elliott (3/15/41).....	Cloudersport, Pa.....	University Apts., Durham, N. C.
<i>Dickinson College.</i>		
Harry Stough Etter (12/16/39).. <i>Duke University.</i>	Hanover, Pa.....	Erwin Apts., Durham, N. C.
William Allen Exum (6/2/41).... <i>Davidson College;</i> <i>Duke University.</i>	Snow Hill, N. C.....	Duke University, House FF.
Richard Webster Finner (12/16/39).....	Tallahassee, Fla.....	Duke University, House FF.
<i>University of Florida.</i>		
William Henry Fisher, Jr. (6/3/40).....	Centreville, Md.....	Duke University, House FF.
<i>Duke University.</i>		
Joseph B. Ford, Jr. (12/16/39).. <i>Duke University.</i>	Savannah, Ga.....	Duke Hospital.
Paul T. Forth (12/14/40)..... <i>University of Michigan.</i>	Rochester, N. Y.....	1011 Lamond Ave., Durham, N. C.
William Henry Fulmer (6/3/40).. <i>Duke University.</i>	Savannah, Ga.....	208 Buchanan Road, Durham, N. C.
Julius Joyce Gibbons, Jr. (3/16/40).....	Wilson, N. C.....	Duke University, House FF.
<i>Duke University.</i>		
James S. Gilliam, Jr. (6/2/41).... <i>University of North Carolina.</i>	Elon College, N. C.....	Duke University, House FF.
Stephen Arnold Ginn (8/31/40).. <i>Duke University.</i>	Royston, Ga.....	Duke University, House FF.
David Watson Goddard (12/16/39).....	Portsmouth, Ohio.....	University Apts., Durham, N. C.
<i>Duke University.</i>		
Erastus Genair Goodman (3/16/40).....	Leland, N. C.....	Duke University, House FF.
<i>University of North Carolina;</i> <i>medical student, ibid., 1936-1938.</i>		
Henry Boone Grant (12/14/40).. <i>University of North Carolina.</i>	Garysburg, N. C.....	Duke University, House FF.
Briant Bowman Guerin (6/2/41).. <i>Duke University.</i>	Mendham, N. J.....	1515 W. Pettigrew St., Durham, N. C.
Risley Frith Haines (6/3/40).... <i>Duke University.</i>	Bayamo, Cuba.....	Duke University, House FF.
Willis Wilbur Harris (6/3/40).. <i>University of Florida.</i>	Bee Ridge, Fla.....	Duke University, House FF.
Leroy Day Harshman (12/16/39).....	Frederickstown, Pa.....	University Apts., Durham, N. C.
<i>Waynesburg College.</i>		
William Carter Hawkins (6/3/40).. <i>Mars Hill College;</i> <i>Duke University.</i>	West Asheville, N. C.....	Duke University, House FF.
Hubert B. Haywood, Jr. (6/2/41).. <i>University of North Carolina.</i>	Raleigh, N. C.....	Duke University, House FF.
Joseph Spurgeon Hiatt, Jr. (12/16/39).....	Lenoir, N. C.....	Duke University, House FF.
<i>Lenoir Rhyne College;</i> <i>Duke University.</i>		
Donald Vincent Hirst (6/2/41).... <i>Duke University.</i>	Durham, N. C....	1507 Duke University Road, Durham, N. C.

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Charles William Hock (6/2/41).. <i>Bluefield College;</i> <i>Duke University.</i>	Bluefield, W. Va.....	Duke University, House FF.
James Weston Hodges (6/2/41) ... <i>North Carolina State;</i> <i>East Carolina Teachers College.</i>	Greenville, N. C.....	Duke University, House FF.
William Nolen Horsley (6/2/41) . <i>Duke University.</i>	Belmont, N. C.....	Duke University, House FF.
Richard Carroll Irving (6/2/41) . <i>Muskingum College.</i>	Conneaut, Ohio.....	Duke University, Durham, N. C.
Rolf Elmo Johnson (3/16/40) <i>Duke University.</i>	Harrisburg, Pa.....	116 Buchanan Road, Durham, N. C.
Stanley Karansky (6/2/41) <i>Columbia University.</i>	Brooklyn, N. Y.....	918 W. Trinity Ave., Durham, N. C.
William Hummel Karmany (6/2/41) <i>Gettysburg College;</i> <i>The Johns Hopkins University;</i> <i>School of Hygiene & Public Health.</i>	Hummelstown, Pa.....	University Apts., Durham, N. C.
James Woodruff Kelley (6/3/40) .. <i>University of Delaware.</i>	Wilmington, Del.....	Duke University, House FF.
William Baugher Kintzing (12/14/40) <i>Dickinson College.</i>	Hanover, Pa.....	University Apts., Durham, N. C.
Glenn Augustus Kiser (6/2/41) .. <i>University of North Carolina.</i>	Bessemer City, N. C.....	Duke University, House FF.
George Harold Kostant (6/3/40) .. <i>Johns Hopkins University.</i>	Brooklyn, N. Y.....	Duke University, House FF.
Harold Hunter Kuhn (6/3/40) ... <i>Duke University.</i>	Charleston, W. Va.....	Duke University, House FF.
Stanley Joseph Lourdeaux (6/3/40) <i>Santa Clara University;</i> <i>Mento Junior College;</i> <i>Stanford University.</i>	San Francisco, Calif...	2510 Englewood Ave., Durham, N. C.
Rudolph Powers McCulloch (6/2/41) <i>Michigan State Normal.</i>	Ypsilanti, Mich.....	Duke University, House FF.
Oscar Lee McFayden, Jr. (12/14/40) <i>Duke University.</i>	Fayetteville, N. C.....	Duke University, House FF.
Paul Franklin Maness (12/16/39) . <i>Wofford College;</i> <i>Duke University.</i>	Yanceyville, N. C.....	Duke Hospital,
Frank Rambo Mann (6/2/41) <i>University of Georgia.</i>	McRae, Ga.....	Duke University, House FF.
George Margolis (6/3/40) <i>Johns Hopkins University.</i>	Montgomery, W. Va.....	Duke University, House FF.
Lester Henry Margolis (6/3/40) . <i>Johns Hopkins University.</i>	Montgomery, W. Va.....	Duke University, House FF.
Archibald Graham McIlwaine Martin, III (12/14/40) <i>Randolph-Macon College;</i> <i>North Carolina State College, S. S.;</i> <i>University of North Carolina, S. S.</i>	Suffolk, Va.....	University Apts., Durham, N. C.

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Addison Lee Messer (12/14/40) .. <i>University of Florida.</i>	Tallahassee, Fla.....	University Apts., Durham, N. C.
Muriel Meyers (6/2/41)	Pittsburgh, Pa.....	1106 Englewood Ave., Durham, N. C.
Robert Plato Miller (3/16/40) ... <i>Duke University.</i>	Lincolnton, N. C.....	University Apts., Durham, N. C.
Wardell Hardee Mills (6/3/40) ... <i>East Carolina Teachers College; University of North Carolina.</i>	Greenville, N. C.....	Duke University, House FF.
Leon Howard Mims, Jr. (12/14/40)	Florence, S. C.....	Duke University, House FF.
<i>The Citadel; University of South Carolina.</i>		
John Edward Moss (6/3/40)	Mobile, Ala.....	208 Buchanan Road, Durham, N. C.
<i>Duke University.</i>		
Edwin Hastings Mulford, II (12/14/40)	Little Falls, N. Y.....	Duke Hospital.
<i>Duke University; S. S., Cornell University.</i>		
Jesse Phillip Muse (6/2/41)	Savannah, Ga.....	Duke University, House FF.
<i>Duke University.</i>		
Robert Gleve Neill (12/14/40) ... <i>Bakersfield Junior College; University of California.</i>	Bakersfield, Calif.....	University Apts., Durham, N. C.
Robert Read Nixon (6/3/40)	San Antonio, Texas.....	Duke University, House FF.
<i>University of Texas; St. Mary's University of San Antonio, s. s.; University of Virginia.</i>		
Joseph Freeman Paquet (3/16/40) .	Portland, Ore.....	Duke University Road, Durham, N. C.
<i>University of Oregon; University of Idaho; Duke University.</i>		
Olin Charles Perryman, Jr. (12/14/40)	Winston-Salem, N. C.....	Duke University, House FF.
<i>University of North Carolina.</i>		
Arnold Zachary Pfeffer (6/2/41) .	New York City.....	602 Atlas Ave., Durham, N. C.
<i>City College of New York; University of Maryland.</i>		
Kenneth Arthur Podger (12/14/40)	Kenmore, N. Y.....	Duke University, House FF.
<i>Duke University.</i>		
Pierre Patillo Poole (6/3/40)	Cross Anchor, S. C.....	Duke University, House GG.
<i>John B. Stetson University.</i>		
Millard Pinson Quillian (6/2/41) .	Bradenton, Fla.....	1515 W. Pettigrew St., Durham, N. C.
<i>University of Florida; Western State Teachers College.</i>		
Mila Elisabeth Rindge (12/14/40) .	Madison, Conn.....	903 Sixth St., Durham, N. C.
<i>Connecticut College for Women.</i>		
Rufus Winston Roberts, Jr. (6/3/40)	Birmingham, Ala.....	Duke University, House GG.
<i>Duke University.</i>		
Ralph Wayne Rundles (6/3/40) ..	Hudson, Ind.....	2109 Chapel Hill Road, Durham, N. C.
<i>De Pauw University; Cornell University Graduate School.</i>		
Robert Thornton Rutherford, Jr. (12/16/39)	Charlotte, N. C.....	Duke University House FF.
<i>Duke University.</i>		

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Clarence Joseph Sapp (6/3/40)...	Albany, Ga.....	Duke University, House FF.
Eric Dutton Savage (12/14/40)...	New York City.....	1022 Gloria Ave., Durham, N. C.
John Green Scott, Jr. (6/2/41)...	Tamqua, Pa.....	Duke University, House FF.
William Harrison Sellers (12/14/40).....	Anniston, Ala.....	1013 Monmouth Ave., Durham, N. C.
Richard Allen Shields, Jr. (6/3/40).....	Lewes, Del.....	Duke University, House FF.
Paul Ervin Simpson (3/16/40)...	Ridgewood, N. J.....	University Apts., Durham, N. C.
Gardner Ford Smart (12/14/40) ..	Troy, Ala.....	Duke University, House GG.
Paul DeLaine Snedegar (6/2/41) ..	Elkins, W. Va.....	University Apts., Durham, N. C.
George Arthur Sotirion (3/16/40).....	Chicopee, Mass.....	Duke University, House FF.
Ross Clarence Speir, Jr. (6/3/40) ..	Birmingham, Ala.....	Duke University, House GG.
David Rodney Stack, Jr. (6/2/41) ..	Charleston, S. C.....	Duke University, House GG.
Charles Clarence Stauffer (6/2/41).....	Washington, D. C.....	Duke University, House FF.
Howard Paul Steiger (12/16/39) ..	Williamsport, Pa.....	University Apts., Durham, N. C.
Gordon Conover Stenhouse (12/14/40).....	Mt. Vernon, N. Y.....	Duke University, House FF.
Richard McCulloch Taliaferro (3/15/41).....	Columbia, S. C.....	Glenn Apts., Durham, N. C.
Harvey Grant Taylor (3/16/40) ..	Los Gatos, Calif.....	Duke Hospital.
William Gilmore Thompson (12/14/40).....	Portland, Maine.....	University Apts., Durham, N. C.
George Tudor Thornhill, Jr. (3/15/41).....	Bluefield, W. Va....	1013 Monmouth Ave., Durham, N. C.
Patti Marie Sills Thornhill (6/3/40).....	Nashville, N. C.....	University Apts., Durham, N. C.

* The date in parentheses after a name indicates the time of completion of the medical course.

<i>Name and Preparation</i>	<i>Home Address</i>	<i>University Address</i>
Raymond Perle Thornhill (6/2/41).....	Kellogg, Idaho.....	Duke University, House FF.
Lloyd Flintom Timberlake (6/2/41).....	Columbia, S. C.....	1013 Monmouth Ave., Durham, N. C.
	<i>Duke University;</i> <i>S. S., University of South Carolina.</i>	
James McKnight Timmons (12/14/40).....	Columbia, S. C.....	Duke University, House FF.
	<i>Duke University;</i> <i>University of South Carolina.</i>	
Philip Cocke Trout (6/2/41).....	Roanoke, Va.....	1013 Monmouth Ave., Durham, N. C.
	<i>University of Virginia.</i>	
James Lyman Tullis (3/16/40)...	Cleveland, Ohio.....	1019 Dacian Ave., Durham, N. C.
	<i>Rollins College.</i>	
James Arthur Tupper (6/3/40)...	Seattle, Wash.....	Duke Hospital.
	<i>University of Washington.</i>	
William Lucas Venning, Jr. (12/16/39).....	Greensboro, N. C.....	812 Anderson St., Durham, N. C.
	<i>Duke University;</i> <i>Harvard.</i>	
George Ritchie Wall (3/16/40)...	Siler City, N. C.....	Duke University, House FF.
	<i>University of North Carolina;</i> <i>medical student, ibid., 1936-1938.</i>	
Robert Eugene Walsh (8/31/40)...	Elmira, N. Y.....	Duke University, House FF.
	<i>Duke University.</i>	
Don James Weekes (6/2/41).....	Fresno, Calif.....	2541 Chapel Hill Road, Durham, N. C.
	<i>Fresno State Teachers College;</i> <i>Stanford University.</i>	
Jack Hamill Welch (6/3/40).....	Columbus, Ohio.....	Duke University, House FF.
	<i>Ohio State University.</i>	
Richard Bidgood Whitaker, Jr. (8/31/40).....	Whiteville, N. C.....	Duke University, House FF.
	<i>Duke University.</i>	
Robert Macon Whitley, Jr. (6/3/40).....	Stantonsburg, N. C.....	Duke University, House FF.
	<i>Louisburg College;</i> <i>Duke University.</i>	
Walter LeRoy Widmark (12/14/40).....	Verona, N. J.....	1515 W. Pettigrew St., Durham, N. C.
	<i>Duke University;</i>	
Prentiss Willson, Jr. (12/14/40).	Washington, D. C.....	1006 Shepherd St., Durham, N. C.
	<i>George Washington University;</i> <i>Pennsylvania State College.</i>	
George Ashby Winstead (3/15/41).	Rocky Mount, N. C.....	Duke University, House FF.
	<i>Wake Forest College.</i>	
Robert Cary Wood (6/3/40).....	Lewisburg, W. Va.....	Duke University, House FF.
	<i>Duke University.</i>	
William Egleston Woodruff (3/16/40).....	Winston-Salem, N. C.....	University Apts., Durham, N. C.
	<i>Duke University.</i>	

* The date in parentheses after a name indicates the time of completion of the medical course.

INSTITUTIONS AT WHICH THE MEDICAL STUDENTS RECEIVED PART OR ALL OF THEIR PREPARATION

Akron University	1	Kentucky Wesleyan	1
Alabama Polytechnic Institute ..	1	Knox College	1
Alabama, University of	1	Lenoir Rhyne College	1
Albion College	1	Louisburg College	1
Antioch College	1	Lynchburg College	3
Bluefield College	2	Manhattan College	1
Bridgewater College	1	Marietta College	1
Bucknell University	1	Marion Institute	1
California State Teachers College	1	Marshall College	3
California, University of	1	Mars Hill College	3
California, University of, at		Maryland, University of	3
Los Angeles	1	Maryville College	1
Capital University	1	Mercer University	1
Catawba College	1	Michigan State College	3
Catholic University of America ..	1	Michigan, University of	5
Central College	1	Muhlenberg College	2
Citadel, The	4	Muskingum College	1
City College of New York	2	Newberry College	1
Colorado College	1	New Hampshire, University of ..	2
Colorado, University of	1	North Carolina State College ...	4
College of Charleston	2	North Carolina, University of ...	14
Columbia Military Academy	1	Ohio State University	1
Connecticut College for Women	1	Oklahoma, University of	1
Connecticut College of Pharmacy	1	Oregon, University of	1
Connecticut State College	1	Pennsylvania State College	2
Cornell University	1	Pennsylvania, University of	4
Davidson College	5	Pittsburgh, University of	1
Delaware, University of	3	Presbyterian Junior College	2
De Pauw University	1	Randolph-Macon College	3
Dickerson College	2	Richmond, University of	1
Duke University	86	Roanoke College	1
East Carolina Teachers College	2	Rochester, University of	1
Edinburgh, University of	1	Rutgers College	4
Elon College	2	Saint Marys, University of,	
Emory and Henry College	1	at San Antonio	1
Florida State College for Women	1	Saint Petersburg Junior College ..	1
Florida Southern College	1	Salem College	1
Florida, University of	8	San Diego State College	1
Franklin and Marshall College ..	1	Santa Clara, University of	1
Fresno State Teachers College ..	1	South Carolina, University of ...	5
George Washington University ..	1	Springfield College	1
Georgia Military Academy	1	Stanford University	9
Georgia, University of	1	Sterling College	1
Gettysburg College	2	Swarthmore College	1
Greensboro College	1	Sweet Briar College	1
Guilford College	2	Tennessee, University of	1
Hampden-Sydney College	3	Texas, University of	2
Harvard College	9	Trinity College	1
Haverford University	1	Tulane University	2
Heidelberg College	1	Vanderbilt University	6
High Point College	1	Virginia Military Institute	2
Hood College	1	Virginia Polytechnic Institute ...	1
Idaho, University of	2	Virginia, University of	7
Indiana State Teachers College	1	Wake Forest College	3
Iowa University	1	Washington and Lee University	3
John B. Stetson University	2	Washington State College	2
Johns Hopkins University	7	Washington Square College	1

Washington, University of	1	Western State Teachers College	1
Wayne University	1	William and Mary College	1
West Virginia University	1	Williams Junior College	1
Western Maryland College	1	Wofford College	4
Western Reserve University	1	Yale University	2

STATES IN WHICH THE MEDICAL STUDENTS WERE BORN

Alabama	6	Minnesota	1
Arizona	1	Missouri	2
Arkansas	1	Montana	2
California	6	Nebraska	1
Colorado	1	New Jersey	14
Connecticut	4	New York	19
Delaware	3	North Carolina	40
District of Columbia	5	North Dakota	1
Florida	7	Ohio	12
Georgia	11	Oklahoma	3
Illinois	8	Oregon	3
Kentucky	3	Pennsylvania	17
Iowa	2	South Carolina	23
Louisiana	1	Tennessee	3
Maine	1	Texas	2
Maryland	6	Virginia	12
Massachusetts	5	Washington	5
Michigan	7	West Virginia	14

Foreign Countries

Canada	1	Panama	1
China	1	Puerto Rico	1
Cuba	2	Sweden	1

GRADUATES WHO ARE OBTAINING THE REQUIRED TWO YEARS
OF HOSPITAL OR LABORATORY TRAINING*

- Felix M. Adams, Jr., *Kemper Military, Okla. Agri. & Mech.*; M.D., Duke (6/5/39); *Int., rotat., St. Joseph's Hospital, Victoria, British Columbia, 7/1/39—*
- Elizabeth Mary Balas, *Pittsburgh*; M.D., Duke (6/6/38); *Int. in Path., Duke Hospital, 1/1/38-6/30/39, and rotat., Baltimore City Hospitals, 7/1/39—*
- Sherwood W. Barefoot, *North Carolina*; M.D., Duke (3/19/38); *Int. and Ass't. Res. in Med. and Fellow in Derm. & Syphilol., Duke Hospital, 3/20/38—*
- Courtlandt Dixon Berry, *Wesleyan*; M.D., Duke (6/6/38); *Int., rotating, Orange Memorial Hospital, Orange, N. J., 7/1/38-6/30/39, and in Obs. & Gyn., Duke Hospital, 7/1/39—*
- Robert Martin Biddle, *Northwestern, Duke*; M.D., latter (6/5/39); *Int., rotat., Union Memorial Hospital, Baltimore, 7/1/39—*
- John Riley Black, *Duke*; M.D., *ibid.* (6/6/38); *Int. in Ped. and Obs., Duke Hospital, 7/1/38-6/30/39; Ass't. Res., Sydenham Hospital, Baltimore, 7/1/39—*
- George McClintock Bogardus, *Washington*; M.D., Duke (6/6/38); *Int. in Surg., Duke Hospital, 6/7-6/30/38; Int., Mount Morris Tbc. Hospital, Mount Morris, N. Y., 10/1/38—*

* The institutions at which each student received his premedical preparation are shown in italics. The date in parentheses after Duke indicates the time of the completion of the medical course.

- John Walter Brandt, *Pennsylvania State, George Washington*; M.D., Duke (6/6/38); *Int., rotat.*, Pittsburgh Medical Center, 7/1/38-6/30/39; *Research Worker in Cancer*, Murdock Research Laboratories, New York City, 7/1/39—
- Walter Earl Brown, *North Carolina*; M.D., Duke (9/3/38), *Int.*, Baker Sanatorium, Lumberton, N. C., 9/7/38—
- Charles Pardue Bunch, *Duke*; M.D., *ibid.* (12/17/38), *Int., rotat.*, Episcopal Hospital, Philadelphia, 1/1/39—
- Julius Caesar Burge, Jr., *Citadel*; M.D., Duke (6/7/37); *Int., rotat.*, Watts Hospital, Durham, N. C., 7/1/37-6/30/38; *Int.*, N. C. State Sanatorium, Sanatorium, 8/1-12/31/38, and *Ass't. Physician*, N. C. State Sanatorium, Black Mountain.
- James Merryman Burk, *Indiana*; M.D., Duke (12/17/38), *Int., rotat.*, Illinois Central Hospital, Chicago, 1/1/39—
- Margaret Virginia Burns, *Duke*; M.D., *ibid.* (9/4/37); *Int.*, N. Y. State Hospital, Ray Brook, N. Y., 10/16/37-12/31/37; *Int. in Ped.*, Duke Hospital, 1/1/38-6/30/38; *Int.*, Kent County General Hospital, Dover, Delaware, 7/1/38-1/31/39; Brandywine Sanatorium, Marshallton, Delaware, 1/1/39—
- C. Willard Camalier, Jr., *George Washington*; M.D., Duke (6/6/38); *Int., rotat.*, and *Ass't Res. in Surg.*, Central Dispensary and Emergency Hospital, Washington, D. C., 6/15/38—
- Gordon Gayton Carmichael, *Rose Polytechnic, Indiana*; M.D., Duke (3/18/39); *Int., rotat.*, Grant Hospital, Columbus, 7/1/39—
- Richard Rutledge Carter, *Oregon*; M.D., Duke (6/6/38); *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/38—
- David Cayer, *Duke*; M.D., *ibid.* (12/17/38), *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 1/1-2/28/39; *Int. in Med.*, Duke Hospital, 3/1/39—
- James Madison Covington, Jr., *Davidson*; M.D., Duke (6/6/38); *Int., rotat.*, Central Dispensary & Emergency Hospital, Washington, D. C., 7/1/38-6/30/39; *Int.*, Grady Hospital, Atlanta, Ga., 7/1/39—
- John Hulon Cox, *North Carolina*; M.D., Duke (9/3/38); *Int.*, *Pub. Health Serv.*, U. S. Marine Hospital, Chicago, 9/1/38—
- Frank Harold Crosby, *Illinois*; M.D., Duke (6/5/39); *Int., rotat.*, St. Luke's Hospital, Cleveland, 7/1/39—
- Almon Rufus Cross, *New Hampshire*; M.D., Duke (6/6/38); *Int. in Obs. and Ped.*, Duke Hospital, 7/1/38-6/30/39, and in *Obs. and Gyn.*, New York City Hospital, 7/1/39—
- James Hawley Currens, *Western Illinois State Teachers, Michigan*; M.D., Duke (6/6/38); *Int. in Med.*, Boston City Hospital, 7/1/38—
- John Munroe Douglas, *Davidson*; M.D., Duke (6/5/39); *Int. in Med.*, Strong Memorial Hospital, Rochester, N. Y., 7/1/39—
- Jere Robert Downing, *Duke*; *New Hampshire*; M.D., *former* (6/5/39); *Int., rotat.*, Maine General Hospital, Portland, Me., 7/1/39—
- Ernest Brindley Dunlap, Jr., *Duke*; M.D., *ibid.* (6/5/39); *Int. in Ped.*, Duke Hospital, 7/1-8/31/39; *Int. in Med.* (Private Wards), Johns Hopkins Hospital, 9/1/39—
- Archie Yelverton Eagles, *Atlantic Christian*; *Duke*; M.D., *ibid.* (6/5/39); *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- William Fox Eckbert, *Delaware*; M.D., Duke (6/5/39); *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- Arnold Lewis Field, *Johns Hopkins*; M.D., Duke (12/17/38); *Int. in Surg.*, Union Memorial Hospital, 1/1-6/30/39, and *Int.*, Woman's Hospital, Baltimore, 7/1/39—
- David Hudson Fogel, *New York, Virginia*; M.D., Duke (6/6/38); *Int. in Med.*, Church Home and Infirmary, Baltimore, Md., 7/1/38-6/30/39, and in *Obs. and Ped.*, Duke Hospital, 7/1/39—

* See footnote, p. 65.

- Atticus James Gill, *Duke*; M.D., *ibid.* (6/6/38); *Int. in Path.*, Duke Hospital, 7/1/38-6/30/39; *Res. in Path.*, St. Paul's Hospital, Dallas Texas, 7/1/39—
- Dan Cummins Gill, *Virginia Military Institute, Oklahoma*; M.D., Duke (6/6/38); *Int. in Med.*, University of Minnesota Hospitals, Minneapolis, Minn., 7/1/38-6/30/39, and in *Surg.*, New York Hospital, 7/1/39—
- William Reed Haas, *Minnesota, Carleton, Wisconsin*; M.D., Duke (3/19/38); *Int. in Med.*, Duke Hospital, 6/20-10/27/38; *Int.*, N. Y. State Hospital, Ray Brook, N. Y., 11/1-12/20/38; *Int. in Med.*, New Haven Hospital, 1/1/39—
- Collins Fremont Hall, *Gettysburg*; M.D., Duke (6/6/38); *Int.*, *rotat.*, Harrisburg General Hospital, Harrisburg, Pa., 7/1/38-6/30/39, and in *Otolaryn. & Ophthal.*, Duke Hospital, 7/1/39—
- Walter Darlington Hastings, Jr., *Columbia Military Academy, Duke*; M.D., latter (6/6/38); *Int. in Orth. and in Surg.*, Duke Hospital, 7/1/38—
- William Victor Haymond, *Utah*; M.D., Duke (12/17/38); *Int. in Surg.*, University of Chicago Clinics, 1/1/39—
- Harry Stuart Hickman, *Duke*; M.D., *ibid.* (6/6/38); *Int.*, *rotat.*, Norfolk General Hospital, Norfolk, Va., 7/1/38-6/30/39, and Nashville General Hospital, Nashville, Tenn., 7/1/39—
- William Fredwin Hollister, *Santa Monica Junior, California*; M.D., Duke (6/6/38); *Int. and Ass't. Res. in Surg.*, Duke Hospital, 7/1/38—
- Joe McKinney Ivie, *Duke*; M.D., *ibid.* (6/6/38); *Int. in Med.*, Baltimore City Hospitals, 7/1/38-6/30/39; *Int.*, Lewis-Gale Hospital, Roanoke, Va., 7/1-9/30/39; *Fellow in Radiology*, Mayo Clinic, Rochester, Minn., 10/1/39—
- Arthur Harvey Joistad, Jr., *Minnesota, North Dakota*; med. stud., latter, 1933-35; M.D., Duke (12/18/37); *Int. in Ped.*, Strong Memorial Hospital, Rochester, N. Y., 1/1/38-6/30/38; *Int. and Ass't Res. in Med.*, Duke Hospital, 7/1/38—
- Harold Barker Kernodle, *Duke*; M.D., *ibid.* (6/5/39); *Int. in Obs. and Ped.*, Duke Hospital, 7/1/39—
- Robert Dumais Kornegay, *Davidson*; M.D., Duke (6/5/39); *Int.*, *rotat.*, Robert Packer Hospital, Sayre, Pa., 7/1/39—
- Charles Larsen, Jr., *Florida*; M.D., Duke (3/18/39); *Int.*, *rotat.*, St. Lukes Hospital, Cleveland, 7/1/39—
- Charles Wells Latchem, *St. Ambrose; Duke*; M.D., latter (12/17/38); *Int.*, *Stud. Health Serv.*, University of Virginia Hospital, 1/1-6/30/39; *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- Jerome Lawrence, *New York*; M.D., Duke (3/18/39); *Int.*, *rotat.*, Welfare Hospital, Welfare Island, N. Y., 7/1/39—
- Lyndon Edmund Lee, Jr., *Virginia, Columbia*; M.D., Duke (12/18/37); *Int. in Tbc. and Heart*, Blue Ridge Sanatorium and University Hospital, Charlottesville, Va., 1/1-6/30/38; *Ass't. National Research Council Narcotics Division*, Pondville Hospital, Wrentham, Mass., 7/1/38—
- Joseph Michael Lesko, *Connecticut Coll. of Pharmacy, Michigan*; M.D., Duke (12/18/37); *Jr. House Officer in Neuro-psych.*, McLean Hospital, 1-10-4/2/38, and *Int. and Ass't. Res. in Med.*, Boston Psychopathic Hospital, Boston, Mass., 4/1/38—
- Thomas Norwood Lide, *Clemson*; M.D., Duke (3/19/38); *Int.*, *rotat.*, Germantown Hospital & Dispensary, 3/20/38-6/30/39; *Fellow in Path.*, University of Pennsylvania School of Medicine, 9/15/39—
- Robert Carl Lincicome, *Marietta*; M.D., Duke (12/17/38); *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 1/1-2/28/39; *Int. in Med.*, Duke Hospital, 3/1/39—
- Paul Warren Lucas, *Duke*; M.D., *ibid.* (6/5/39); *Int.*, *Pub. Health Serv.*, U. S. Marine Hospital, Baltimore, 7/1/39—

* See footnote, p. 65.

- William Jefferson McAnally, Jr., *Duke*; M.D., *ibid.* (12/17/38); *Int.*, Edward W. Sparrow Hospital, Lansing, Mich., 1/1-6/30/39, and in *Pub. Health Serv.*, U. S. Marine Hospital, New Orleans, 7/1/39—
- William Alexander MacColl, *Amherst College, Amherst Graduate School, Massachusetts State Graduate School*; M.D., *Duke* (3/19/38); *Int. in Ped.*, Strong Memorial Hospital, 3/20/38-6/30/38; *Int. in Ped.*, *Duke Hospital*, 7/1/38-6/30/39; *Fellow in Med.*, Joseph H. Pratt Diagnostic Hospital, Boston, 9/1/39—
- Theodore Roosevelt Mattocks, *Duke*; M. D., *ibid.* (12/17/38); *Int.*, *rotat.*, Charleston General Hospital, Charleston, W. Va., 1/1/39—
- Harold Ellis Merkley, *Brigham Young*; M.D., *Duke* (12/17/38); *Int.*, Denver General Hospital, 1/1/39—
- Francis Pointer Meyer, Jr., *St. Petersburg Junior*; *Duke*; M.D., *latter* (3/18/39); *Int.*, Mound Park Hospital, St. Petersburg, Fla., 4/1-6/20/39, and *rotat.*, Temple University Hospital, Philadelphia, 6/21/39—
- Oscar Peyton Moffitt, Jr., *High Point*; *Duke*; M.D., *latter* (12/17/38); *Int.*, Bay City General Hospital, Bay City, Mich., 1/1-6/30/39, and in *Pub. Health Serv.*, U. S. Marine Hospital, Baltimore, 7/1/39—
- Rufus Clegg Morrow, Jr., *Davidson*; M.D., *Duke* (12/17/38); *Honorary Research Fellow in Surg. and Physiol.*, Yale Univ. Sch. of Med., 3/1-6/30/39; *Int. in Path.*, 7/1/39—
- Henry George Morton, *Duke*; M.D., *ibid.* (12/18/37); *Int. and Ass't. Res. in Ped.*, *Duke Hospital*, 1/1-8/31/38; *Int. in Med.*, N. Y. Postgraduate Hospital, 10/1/38—
- Lyle Alfred Moser, *Keystone Teachers; Lebanon Valley*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Pittsburgh Medical Center, 7/1/39—
- Colin Alexander Munroe, *Davidson*; M.D., *Duke* (6/5/39); *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 8/1-10/31/39, and in *Med.*, *Duke Hospital*, 11/1/39—
- Henry Ten Eycke Munson, *Wayne*; *Duke*; M.D., *latter* (6/5/39); *Int.*, *rotat.*, Harper Hospital, Detroit, 6/26/39—
- Brodie Crump Nalle, Jr., North Carolina; M.D., *Duke* (6/5/39); *Voluntary Ass't. in Path.*, *Duke Univ. Sch. of Med.*, 7/1/39—
- Glenn Carraway Newman, *Duke*; M.D., *ibid.* (6/5/39); *Int. in Obs. and Ped.*, *Duke Hospital*, 7/1/39—
- Robert H. Nickau, *North Carolina State*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Jersey City Hospital, 7/1/39—
- Pat Ireland Nixon, Jr., *Texas*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Baltimore City Hospitals, 7/1/39—
- Gilbert Matthewson Palen, *Hamilton*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Hahnemann Hospital, Phila., 7/1/39—
- Albert Archer Parrish, *Duke*; M.D., *ibid.* (12/17/38); *Int.*, Rocky Mount Sanatorium, Rocky Mount, N. C., 1/5-6/30/39, and in *Surg.*, *Duke Hospital*, 7/1/39—
- James McGuire Peery, *William and Mary*; M.D., *Duke* (6/6/38); *Int.*, *rotat.*, Germantown Hospital and Dispensary, Germantown, Pa., 7/1/38—
- R. Mel Perry, *Washington*; M.D., *Duke* (6/6/38); *Int. and Ass't. Res. in Ped.*, Vanderbilt University Hospital, 7/1/38—
- William Flynn Powell, *Princeton*; M.D., *Duke* (12/18/37); *Int.*, Baker Sanatorium, Lumberton, N. C., 2/24-6/30/38; *Int.*, U. S. Public Health Service, Marine Hospital, 7/1/38-6/30/39, and *Res. in Ear, Eye, Nose & Throat*, Touro Infirmary, New Orleans, La., 7/1/39—
- Lawrence Augustus Pyle, Jr., *Maryland*; *Washington*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Central Dispensary and Emergency Hospital, Washington, D. C., 6/15/39—

* See footnote, p. 65.

- James Sidney Raper, *Duke*; M.D., *ibid.* (9/3/38); *Int.*, Rocky Mount Sanatorium, Rocky Mount, N. C., 9/4/38-2/28/39, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 3/1-5/31/39, and *rotat.*, Germantown Hospital, Germantown, Pa., 7/1/39—
- Ira Stanley Ross, *Duke*; M.D., *ibid.* (6/6/38); *Int. in Ped.*, Duke Hospital, 7/1/39—
- Weldon Troh Ross, *Oregon*; M.D., *Duke* (6/6/38); *Int. in Med.*, University of Chicago Clinics, 7/1/38-6/30/39; *Ass't. Res. in Surg.*, Church Home & Infirmary, Baltimore, 7/1/39—
- William James Rysanek, Jr., *Johns Hopkins*; M.D., *Duke* (3/18/39); *Int.*, Woman's Hospital, Baltimore, 7/1/39—
- James Wilbur Sachs, *Duke*; M.D., *ibid.* (6/6/38); *Int.*, Public Health Service, U. S. Marine Hospital, Seattle, Wash., 7/1/38-6/30/39, and Medical Center for Federal Prisoners, Springfield, Mo., 7/1/39—
- Logan Everett Sawyer, *Duke*; M.D., *ibid.* (3/18/39); *Int.*, Union Memorial Hospital, Baltimore, 3/23-6/23/39, and in *Obs. and Ped.*, Duke Hospital, 7/1/39—
- Paul Welstead Schanher, Jr., *Duke*; M.D., *ibid.* (12/17/38); *Int. in Med.*, Baltimore City Hospitals, 1/1-6/30/39, and in *Surg.*, Duke Hospital, 7/1/39—
- Thomas Gilbert Schnoor, *California; Nevada*; M.D., *Duke* (12/17/38); *Int. in Surg.*, Duke Hospital, 2/1-5/15/39, and *Stonford University Hospital*, 7/1/39—
- Robert Cathcart Smith, *Citadel*; M.D., *Duke* (6/5/39); *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- Sidney Stark, *New York*; M.D., *Duke* (6/5/39); *Int.*, *rotat.*, Metropolitan Hospital, New York, 7/1/39—
- Wray Donald Storey, *Geneva*; M.D., *Duke* (3/18/39); *Int.*, Goldsboro City Hospital, Goldsboro, N. C., 4/1-5/31/39, and *rotot.*, Washington Hospital, Washington, Pa., 7/1/39—
- George Merritt Stroud, *Duke*; M.D., *ibid.* (3/19/38); *Int. and Ass't. Res. in Med.*, Duke Hospital, 3/20/38—
- Charles Woodrow Styron, *North Carolino State*; M.D., *Duke* (6/6/38); *Int. in Ped.*, Duke Hospital, 7/1/38-3/31/39, and in *Med.*, Boston City Hospital, 4/1/39—
- Doris Lee Surles, *Duke*; M.D., *ibid.* (6/5/39); *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- Joseph Dimmick Thetford, *Tulane; Alabomo*; M.D., *Duke* (12/17/38); *Int. and Ass't. Res. in Med.*, Duke Hospital 1/1/39—
- Edwin Hale Thornhill, *Duke*; M.D., *ibid.* (3/19/38); *Int. in Surg.*, Duke Hospital, 4/1-6/30/38; *Int.*, *rotat.*, Church Home and Infirmary, Baltimore 7/1/38-6/30/39, and in *Otolaryn. & Ophthol.*, Duke Hospital, 7/1/39—
- John Redden Timmons, *South Carolina; Duke*; M.D., latter (6/5/39); *Int. in Med.*, Henry Ford Hospital, Detroit, 7/1/39—
- William Trachtenberg, *North Carolino; Harvard*; M.D., *Duke* (3/18/39); *Int.*, Goldsboro City Hospital, Goldsboro, N. C., and *rotot.*, *Chority Hospital*, New Orleans, 7/1/39—
- Eulyss Robert Troxler, *Duke*; M.D., *ibid.* (6/6/38); *Int. in Med.*, Baltimore City Hospitals, 7/1/38-6/30/39, and in *Surg.*, Duke Hospital, 7/1/39—
- Larry Turner, *Duke*; M.D., *ibid.* (6/5/39); *Int. in Med.*, Baltimore City Hospitals, 7/1/39—
- Joe Milton Vanhoy, *Duke*; M.D., *ibid.* (6/6/38); *Int.*, Orthopaedic Hospital, Gastonia, N. C., 7/1-8/31/38; *Int. in Surg.*, Bellevue Hospital, 9/21/38—
- Philip Holt Varner, *West Virginia*; med. stud. *ibid.*, 1934-36; M.D., *Duke* (6/6/38); *Int.*, *rotat.* and *Chief Res. Physician*, Sibley Memorial Hospital, Washington, D. C., 7/1/38—

* See footnote, p. 65.

- Norman Clemin Veale, *San Diego State, California*; M.D., Duke (12/18/37); *Int.*, Baker Sanatorium, Lumberton, N. C., 1/1-2/24/38; *Int.*, U. S. Med. Res., Station Hospital, Fort McClennan, Ala., 2/25-6/25/38; *Int.*, U. S. Public Health Service, Marine Hospital, New Orleans, La., 7/1/38-6/30/39; *Physician*, CCC Camp, Heflin, Ala., 7/1/39—
- Joseph Allison Cannon Wadsworth, *Davidson*; M.D., Duke (6/5/39); *Int.* in *Med.*, Bellevue Hospital, New York City, 7/1/39—
- Frederic Monroe Jacob Walp, *Pennsylvania*; Muhlenberg; M.D., Duke (6/5/39); *Int.*, *rotat.*, Allentown General Hospital, Allentown, Pa., 7/1/39—
- George Archibald Watson, Jr., *Lchigh; New York; Duke*; M.D., Duke (6/5/39); *Int.*, *rotat.*, Watts Hospital, Durham, N. C., 7/1/39—
- Roderick Cameron Webb, *St. Petersburg Junior; Duke*; M.D., latter (6/5/39); *Int.*, *rotat.*, Albany Hospital, Albany, N. Y., 7/1/39—
- Nelson Mortimer Webster, *Nevada*; M.D., Duke (12/18/37); *Int.* in *Obs.*, Baltimore City Hospitals, 1/1-6/30/38; *Int.* and *Ass't. Res.* in *Obs.*, Duke Hospital, 7/1/38—
- Kenneth Durham Weeks, *Davidson*; M.D., Duke (6/5/39); *Int.* in *Med.*, Duke Hospital, 7/1/39—
- Warner Lee Wells, *Duke*; M.D., *ibid.* (6/6/38); *Int.* and *Ass't. Res.* in *Surg.*, Duke Hospital, 7/1/38—
- Irving Bernard Wexler, *New York*; M.D., Duke (6/5/39); *Int.*, *rotat.*, Jewish Hospital of Brooklyn, New York, 7/1/39—
- Charles Stanly Whitaker, *Duke*; M.D., *ibid.* (6/6/38); *Int.*, *rotat.*, Methodist Episcopal Hospital, Brooklyn, N. Y., 7/1/38—
- Reaves Augustus Wilson, *Florida*; M.D., Duke (6/5/39); *Int.*, *rotat.*, Jackson Memorial Hospital, Miami, Fla., 7/1/39—
- Frank Mahlon Woolsey, Jr., *Duke*; M.D., *ibid.* (6/6/38); *Int.* in *Path.*, Washington University, St. Louis, Mo., 7/1/38-6/30/39; *Ass't. Res.* in *Med.*, New Haven Hospital, 7/1/39—
- James Clay Wren, *Rutherford; Duke*; med. stud., *North Carolina*; M.D., Duke (3/18/39); *Int.* in *Ped.*, Duke Hospital, 4/1-6/30/39, and in *Med.*, Bellevue Hospital, New York City, 7/1/39—
- Dorothy Bryan Wyvell, *Duke, George Washington*; M.D., former (6/6/38); *Int.*, Children's Hospital, Montreal, Canada, 7/1/38-6/30/39, and in *Med.* (*Private Service*), The Johns Hopkins Hospital, 7/1/39—

GRADUATES WHO HAVE COMPLETED SATISFACTORILY TWO OR MORE YEARS OF HOSPITAL OR LABORATORY TRAINING*

- Gerald Lyon Ackerman, *Washington and Jefferson, West Virginia*; med. stud., latter, 1929-31; M.D., Duke (3/22/33); *Int.*, *Ass't. Res.* and *Res.* in *Surg.*, Church Home and Infirmary, Baltimore, Md., 7/1/33-6/30/37; *Present address (in practice)*, Saginaw, Mich.
- Carlton Noble Adams, *Wake Forest*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int.*, *Ass't. Res.* and *Res.* in *Surg.*, Church Home and Infirmary, Baltimore, Md., 7/1/32-6/30/36; *present address (in practice)*, Winston-Salem, N. C.
- Raymond DeLacey Adams, *Oregon*; M.D., Duke (12/19/36); *Int.* and *Ass't. Res.* in *Med.*, Duke Hospital, (7/1/37-6/30/38); *Res.* in *Neurol.*, Massachusetts General Hospital, Boston, Mass., 8/1/38—
- Trogler Francis Adkins, *North Carolina*; M.D., Duke (12/19/36); *Int.* in *Surg.* and *Int.* and *Ass't. Res.* in *Obs.* and *Gyn.*, Duke Hospital, 1/1/37—
- Francis William Alter, Jr., *Yale*; M.D., Duke (6/7/37); *Voluntary Ass't.* in *Infectious Diseases*, St. Bartholomew's Hospital and National Hospital, London, England, 7/15-12/15/37; *Int.* in *Ped.*, 1/1/38-6/30/39, and in *Otolaryn.*, Presbyterian Hospital, New York City, 7/1/39—

* See footnote, p. 65.

- Robert Leonhardt Alter, *Dartmouth, Toledo, Ohio*; M.D., Duke (9/4/37); *Int. in Obs.*, Baltimore City Hospitals, 9/1/38-6/30/39; *Int. in Obs. & Gyn.*, Duke Hospital, 7/1/39—
- Lacy Allen Andrews, Jr., *North Carolina*; med. stud., *ibid.*, 1928-30; M.D., Duke (6/11/32); *Int.*, Baltimore City Hospitals, 7/1/32-6/30/33, and Watts Hospital, Durham, N. C., 7/1/33-6/30/34; *present address (in practice)*, Durham, N. C.
- Jay Morris Arena, *West Virginia*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int. in Ped.*, Strong Memorial Hospital, Rochester, N. Y., 3/22-6/30/32, and Johns Hopkins Hospital, 7/1/33-6/30/35; *Instr., Assoc. and Ass't. Prof. of Ped.*, Duke University School of Medicine, 7/1/35—
- Gordon Joseph Axelson, *Northwestern, Virginia*; M.D., Duke (3/20/37); *Int.*, City of Chicago Municipal Tuberculosis Sanatorium, 5/1-5/31/37; *Int., rotating, and Ass't. Res. in Med.*, Henry Ford Hospital, Detroit, 7/1/37-6/30/39; *Ass't. Res. in Endocrinology*, Duke Hospital, 9/1/39—
- Maynard Backer Badanes, *Johns Hopkins*; M.D., Duke (9/5/36); *Int. in Ped.*, Duke Hospital, 9/6-12/31/36; *Int., rotat.*, Sydenham Hospital, New York City, 1/1/37-12/31/38; *present address (in practice)*, Flushing, Long Island, N. Y.
- George James Baer, *Duke*; M.D., *ibid.* (9/4/37); *Int. in Med.*, Henry Ford Hospital, Detroit, 9/1/37-8/1/38; *Int. in Orth.*, Johns Hopkins Hospital, 9/1/38-6/30/39; *Ass't. Res. in Med.*, Baltimore City Hospitals, 7/1/39—
- John Samuel Baker, *Southern California*; M.D., Duke (9/1/34); *Int. in Med.*, Duke Hospital, 9/1/34-8/31/35; *Res. in Med.*, San Diego County Hospital, San Diego, Calif., 1/1-6/30/36; *Res. of Clinics*, Riverside Co. Hospital, Riverside, Calif., 9/1/36-12/31/37; *Res., Outside Obstetrics Service*, Los Angeles Co. Hospital, Los Angeles, Calif., 1/6/38-8/31/38; *present address (in practice)*, 826 S. Hobart St., Los Angeles, Calif.
- Lenox Dial Baker, *Tennessee, North Carolina*; M.D., Duke (12/19/33); *Int. in Surg. and Ass't. Res. and Res. in Ortho.*, Johns Hopkins Hospital, 1/1/34-8/31/37; *Inst. in Ortho.*, Duke University School of Medicine, 9/1/37—
- George Jay Baylin, *Johns Hopkins*; M.D., Duke (3/20/37); *Ass't. in Anat.*, Duke Medical School, 4/1-6/30/37; *Int. in Surg.*, Sinai Hospital, Baltimore, 7/1/37-6/30/38; *Voluntary Ass't. in Path.*, Guy Hospital, London, England, 9/1/38-1/26/39; *Instr. in Anat.*, Duke Univ. School of Medicine, and *Ass't. Res. in Roentgen.*, Duke Hospital, 2/1/39—
- Bradford Bissell, *Cornell, North Carolina*; M.D., Duke (12/19/36); *Int. in Med. and Ass't. House Physician*, 1/1/37-12/31/37; *Int. in Surg. and House Physician*, The French Hospital, New York City, 4/1/38—
- John Valentine Blady, *Wisconsin*; med. stud., *ibid.*, 1926-27, 1928-29; M.D., Duke (3/19/32); *Int. in Surg.*, Duke Hospital, 7/1/32-6/30/33; *Ass't. Res., Res. and Inst. in Roent.*, Temple University Hospital, Philadelphia, 7/1/33-12/31/35; *Int. in Roent., Clin. Fellow and Res. Surgeon*, Memorial Hospital, New York City, 1/1/36-6/30/39; *present address (in practice)*, Philadelphia, Pa.
- Berget Henri Blocksom, Jr., *Indiana, Michigan*; M.D., Duke (9/2/33); *Int. in Surg.*, Duke Hospital, 9/3/33-6/30/34; *Ass't. Res. and Res. in Urol.*, Univ. of Chicago Clinics, 7/1/34-6/30/37; *present address (in practice)*, Rockford, Ill.
- Julius Boiarsky, *West Virginia, Ohio State*; med. stud., former, 1931-33; M.D., Duke (6/8/35); *Int., rotat.*, Deaconess Hospital, Cincinnati, O., 7/1/35-6/30/36; *Ass't. Res. in Ortho. Surg.*, Charleston General Hospital, Charleston, W. Va., 7/1/36-6/30/37; *present address (in practice)*, Boiarsky Hospital, Charleston, W. Va.

* See footnote, p. 65.

- Ned Ornell Bowman, *North Carolina*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int.*, Middlesex General Hospital, Middlesex, N. J., 7/1/32-12/1/33; *Ass't. Res. and Res.*, Eastern Dispensary and Casualty Hospital, Washington, D. C., 1/1-6/30/34; *Inst. in Physiology and Ass't. School Physician*, Rutgers Univ., New Brunswick, N. J., 7/1/34-6/30/36; *present address (in practice)*, New Brunswick, N. J.
- Oren Douglas Boyce, *North Carolina*; M.D., Duke (9/2/33); *Int.*, Jefferson Hospital, Roanoke, Va., 9/3/33-6/30/34; and in *Obs. and Gyn.*, Vanderbilt Univ. Hospital, 7/1/34-6/30/35; *present address (in practice)*, Rural Retreat, Va.
- Edgar Marx Braun, *Brown*; M.D., Duke (6/13/36); *Int. in Ped.*, Brooklyn Jewish Hospital, 7/1/36-6/30/37; *Int.*, *rotat.*, St. Elizabeth's Hospital, Elizabeth, N. J., 7/1-8/31/37; *Int.*, *rotat.*, Muhlenberg Hospital, Plainfield, N. J., 11/20/37-6/30/38; *Res. in Ped.*, Beth-El Hospital, Brooklyn, N. Y., 7/1-12/31/38; *present address (in practice)*, Elverton, W. Va.
- Earl Winfrey Brian, *Duke*; M.D., *ibid.* (9/1/34); *Int. in Med.*, Henry Ford Hospital, Detroit, 9/1/34-6/30/35; *Int. in Path.*, Duke Hospital, 7/1/35-6/30/36; *Ass't. Res. in Med. and Res. Physician*, Henry Ford Hospital, 7/10/36-8/31/38; *present address (in practice)*, Raleigh, N. C.
- William Henry Bridgers, *Duke*; M.D., *ibid.*, (6/13/36); *Int. and Ass't. Res. in Surg.*, Duke Hospital, 7/1/36—
- Ernest Bruce Brooks, *Duke*; M.D., *ibid.* (9/2/33); *Int.*, Union Memorial Hospital, Baltimore, 9/3/33-6/30/34; *Ass't. Res.*, Univ. of Maryland Hospital, Baltimore, 7/1/34-6/30/35; *Obs. Outside Service*, Charlotte, N. C., July and August, 1935; *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., September and October, 1935; *present address (in practice)*, 515 Reynolds Bldg., Winston-Salem, N. C.
- Frank Woolridge Buckner, *Davidson*; M.D., Duke (6/13/36); *Int. in Surg.*, Duke Hospital, 7/1/36-2/28/37; *Int. in Surg. and Int.*, *Ass't. Res. and Res. in Ear, Nose and Throat*, New Haven Hospital, 3/1/37—
- Arthur Raymond E. Buirge, *Drake, Duke*; M.D., *latter* (12/18/34); *Int. in Obs. and Gyn. and in Surg.*, 1/1/35-6/30/36; and *Ass't. and Res. in Surg.*, Univ. of Minnesota Hospitals, 7/1/36-6/30/38; *Trainee in Cancer*, U. S. Pub. Health Service, 7/1/38-6/30/39; *Res. in Surg.*, Univ. of Minnesota Hospitals, 7/1/39—
- Benjamin Brooks Burrill, Jr., *Dartmouth, Duke*; M.D., *latter* (6/13/36); *Int.*, *rotat.*, Mountinside Hospital, Montclair, N. J., 7/1/36-12/31/37; *Res.*, Essex County Isolation Hospital, Belleville, N. J., 1/1-7/31/38; *present address (in practice)*, Pompton Plains, N. J.
- John C. Burwell, Jr., *Duke, Harvard*; M.D., *former* (9/2/33); *Int.*, New York Postgraduate School and Hospital, New York City, 9/3/33-6/30/34; and in *Obs. and Gyn.*, New York Hospital, 9/1/34-6/30/35; and Bellevue Hospital, New York City, 7/1/35-6/30/36; *present address (in practice)*, Greensboro, N. C.
- Jasper Lamar Callaway, *Alabama*; med. stud., *ibid.*, 1929-31; M.D., Duke (12/21/32); *Fellow*, Univ. of Pennsylvania Hospital, Philadelphia, Pa., 1/1-6/30/33; *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/33-1/23/35; *Instr. in Phys. Diag.*, Univ. of Alabama School of Medicine, 2/1-5/31/35; *Instr. in Derm. & Syphil.*, Univ. of Pennsylvania Hospital, 6/15/35-6/30/37; *Instr. and Assoc. in Derm. & Syphil.*, Duke Univ. School of Medicine, 7/1/37—
- James Henderson Cherry, *Mars Hill*; M.D., Duke (12/19/33); *Int.*, Goldsboro City Hospital, Goldsboro, N. C., 1/1-6/30/34, and in *Surg.*, Duke Hospital, 7/1/34-6/30/35; *Fellow in Orth. Surg.*, Mayo Clinic, Rochester, Minn., 7/1/35—

* See footnote, p. 65.

- Charles Francis Chunn, *Duke*; M.D., *ibid.* (12/20/35); *Int. in Surg.*, Duke Hospital, 1/1/36-4/30/37; *Ass't. Res. in Surg.*, Henry Ford Hospital, Detroit, 5/10/37—
- Milton Carpinter Cobey, *Amherst*; M.D., *Duke* (9/1/34); *Int. in Orth. and in Surg.*, and *Ass't Res. and Res. in Orth.*, Johns Hopkins Hospital, 9/1/34-8/31/39; *present address (in practice)*, 1835 Eye St., Washington, D. C.
- Charles Anthony Collins, *Columbia*; M.D., *Duke* (8/31/35); *Int. in Med.*, Henry Ford Hospital, Detroit, 9/1/35-8/31/37; *present address (in practice)*, White Plains, N. J.
- Martin Edward Conti, *West Va.*; med. stud., *ibid.*, 1929-31; M.D., *Duke* (3/22/33); *Int. in Obs. and Gyn.*, Duke Hospital, 3/23-8/31/33; *rotating* Watts Hospital, Durham, N. C., 9/1/33-8/31/34, and City Hospital, Mobile, Ala., 7/1/34-6/30/35; *in practice*, Youngstown, Ohio, 7/1/35-6/30/39; *Lieut., U. S. Navy*, Norfolk Naval Hospital, Portsmouth, Va., 9/1/39—
- Gabriel Hernando Cortes, *Michigan, Duke*; M.D., *latter* (12/20/35); *Int. in Med.*, New York Postgraduate Hospital, 1/1/36-12/31/37; *present address (in practice)*, Bogota, Colombia, S. A.
- Kenneth John Costich, *Holy Cross*; M.D., *Duke* (12/20/35); *Int., rotat.*, New York Polyclinic Hospital, 1/1-4/3/36; *Int.*, Hugh Chatham Memorial Hospital, Elkin, N. C., 7/25/36-6/30/37; *Int., rotat.*, Ellis Hospital, Schenectady, N. Y., 7/12/37-6/30/38; *Associate Physician*, Veterans Administration Bureau, Livermore, Calif.
- Felix Hughs Crago, *West Va.*; med. stud., *ibid.*, 1931-33; M.D., *Duke* (6/8/35); *Int., rotat.*, Ancker Hospital, St. Paul, Minn., 7/1/35-6/30/36; *Fellowship in Med.*, Univ. of Minnesota, 7/1/36-6/30/39; *present address (in practice)*, Great Falls Clinic, Great Falls, Mont.
- Charles Cramer, *Cooper Union, Columbia*; M.D., *Duke* (8/31/35); *Int. in Med.*, Vanderbilt University Hospital, 9/1/35-6/30/36; *Res. in Path.*, St. John's Hospital, Brooklyn, N. Y., 7/1/36-6/30/37; *Ass't. Res. and Res. in Med.*, Queen's General Hospital, Long Island, N. Y., 7/1/37-6/30/39; *present address (in practice)*, Queens, Long Island, N. Y.
- Maurie Bertram Cree, *Wake Forest*; M.D., *Duke* (12/19/34); *Int., rotat.*, Baptist Memorial Hospital, Memphis, Tenn., 1/10/35-6/30/36; *Gen'l. Res. and Res. in Surg.*, Greenville General Hospital, Greenville, S. C., 7/1/36-6/30/37; *in practice*, Newport News, Va., 7/1-11/30/37; *Res.*, Rex Hospital Raleigh, N. C., 12/1/37-6/30/38; *Res. in Surg.*, James Walker Memorial Hospital, Wilmington, N. C., 7/1/38-6/30/39; *Surgeon*, Camp Wright Hospital, Manteo, N. C., 7/1-8/31/39; *present address (in practice)*, Concord, N. C.
- Bennie Booker Dalton, *North Carolina*; med. stud., *ibid.*, 1928-30; M.D., *Duke* (6/11/32); *Int.*, McKeesport Hospital, McKeesport, Pa., 7/1-7/31/32; and Watts Hospital, Durham, N. C., 8/1/32-7/31/33, and Wassaic State School, Wassaic, N. Y., 10/10/33-10/10/34; *County Health Officer*, Rockingham, N. C., 1/1/35-10/31/36; *present address (in practice)*, Liberty, N. C.
- William Howard Darden, *Alabama*; med. stud., *ibid.*, 1929-31; M.D., *Duke* (12/21/32); *Int. and Ass't. Res.*, Northwestern Hospital, Minneapolis, Minn., 1/1/33-12/31/34; *in practice*, 214½ Vermillion St., Hastings, Minn., 7/1-12/15/35; *present address*, Emergency Hospital of the Tennessee Coal, Iron and Railroad Co., Ensley, Birmingham, Ala.
- Harry Leonard Dein, *Duke*; M.D., *ibid.* (3/20/37); *Int. in Med.*, Duke Hospital, 3/21-6/30/37; *Int., rotat.*, Atlantic City Hospital, 7/1/37-6/30/38; *Int. in Surg.*, Duke Hospital, 7/1/38-6/30/39; *Ass't. Res. in Surg.*, Welfare Hospital, Welfare Island, N. Y., 7/1/39—

* See footnote, p. 65.

- John Sinclair Denholm, *Pittsburgh*; M.D., Duke (11/30/35); *Int. in Med.*, Duke Hospital, 12/1/35-8/31/36; *Ass't. and Clinic Phys.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 7/1/36-6/30/39; *present address (in practice)*, Burlington, N. C.
- Rudolph John Depner, *Rhode Island State, Missouri*; med. stud., latter, 1928-30; M.D., Duke (3/19/32); *Int.*, Kansas City Hospital, 7/1/32-6/30/33; *Ass't. Res. and Ass't. Supt.*, Exeter School, Lafayette, R. I., 7/1/33-7/31/35; *Med. Int. and Ass't. Phys. in Psychiatry*, Child Guidance Clinic, Wassaic State School, Wassaic, N. Y., 8/1/35—
- John William Devine, Jr., *Washington and Lee*; M.D., Duke (3/21/35); *Int. in surg.*, and *Ass't. Res. in Surg. and Path.*, Duke Hospital, 7/1/35-6/30/38; *present address (in practice)*, Lynchburg, Va.
- Leslie Van Dyke Dill, *Duke*; M.D., *ibid.* (6/13/36); *Int. in Med.*, Vanderbilt Univ. Hospital, 7/1/36-6/30/37; *Jr. Ass't. in Path.*, Duke Hospital, 7/1/37-6/30/38; *Int.*, New York City Lying-in Hospital (Cornell Medical Center), 7/1/38-6/30/39; *Ass't. Res. in Obs. and Gyn.*, New York Hospital, 7/1/39—
- Benjamin George Dinin, *New York Univ., Alabama*; M.D., Duke (9/2/33); *Int. in Med.*, Duke Hospital, 9/3/33-8/31/34; *Ass't. Res.*, New York Hospital, New York City, 9/1/34-6/30/35; *Int. in Ped.*, Brooklyn Jewish Hospital, Brooklyn, N. Y., 7/1/35-6/30/36; *Res. in Communicable Diseases*, Kingston Ave. Hospital, Brooklyn, N. Y., 7/1/36—
- Grant Lester Donnelly, *Duke, Chicago*; med. stud., North Carolina, 1927-30; M.D., Duke (6/10/33); *Int. in Obs. and Gyn.*, Duke Hospital, 6/12-8/31/33; *Assoc. Prof. in Phar.*, Univ. of North Carolina, 9/1/35—
- William Franklin Druminond, *Alabama*; med. stud., *ibid.*, 1933-35; M.D., Duke (3/20/37); *Int.*, North Louisiana Sanatorium, Shreveport, 4/1-6/30/37; *Int., Pub. Health Service*, U. S. Marine Hospital, New Orleans, 7/1/37-6/30/38; *Res.*, Highland Sanitarium, 7/1/38-6/30/39, and *Physician*, Highland Clinic, Shreveport, La., 7/1/39—
- Raymond John Duffy, *Pittsburgh*; med. stud., West Va., 1929-31; M.D., Duke (6/10/33); *Int.*, Boston Psychopathic Hospital, 7/1/33-6/30/34; *Staff Member*, McLean Hospital, Waverley, Mass., 7/1/34-4/30/35; *Int.*, 5/1/35-12/31/36, and *Psychiatrist in Charge*, Carney Hospital, 1/1/37-6/30/38; *Staff Psychiatrist*, Mass. General and St. Elizabeths Hospitals, and in *practice*, 482 Beacon St., Boston, Mass., 7/1/36—
- Charles Ross Duncan, *Wake Forest*; med. stud., *ibid.*, 1931-33; M.D., Duke (9/4/37); *Int., rotat.*, Rex Hospital, Raleigh, N. C., 9/1/37-6/30/38; *Res., general*, Spartanburg General Hospital, Spartanburg, S. C., 7/1/38-6/30/39; *Int.*, N. C. Orthopedic Hospital, Gastonia, N. C., 7/1/39—
- Elbert Newton DuPuy, *West Virginia*; med. stud., *ibid.*, 1928-39; M.D., Duke (3/19/32); *Int., rotat.*, Church Home and Infirmary, Baltimore, Md., 7/1/32-6/30/33; *Ass't. Res. and Res. in Obs. and Gyn.*, University of Maryland Hospital, Baltimore, Md., 7/1/34-6/30/36; *in practice*, Buchanan Co., Va., 7/1/36-2/28/37; *Surgeon*, SS "City of Norfolk," 3/1-9/30/37, *present address (in practice)*, Beckley, W. Va.
- Eleanor Beamer Easley, *Idaho, Iowa, George Peabody, Vanderbilt*; M.D., Duke (3/21/34); *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 3/25-5/31/34; *Int. and Ass't. Res. in Med.*, and *Int. and Ass't. Res. in Obs. and Gyn.*, Duke Hospital, 7/1/34—
- John Wetson Edwards, *New Mexico Military Institute, Duke*; M.D., latter (6/13/36); *Int. and Ass't. Res.*, University of California Hospital, San Francisco, Cal., 9/1/37-6/30/39, and *Res. in Ped.*, San Francisco City & County Hospital, 7/1/39—
- William Dempsey Farmer, *Duke*; M.D., *ibid.* (6/9/34); *Int. in Med.*, Baltimore City Hospitals, 7/1/34-6/30/35; *Int. in Surg.*, and *Int., Ass't. Res. and Res. in Otolaryn. and Ophthal.*, Duke Hospital, 7/1/35-6/30/39; *Instr. in Otolaryn. and Ophthal.*, Duke Univ. School of Medicine, 9/1/39—

* See footnote, p. 65.

- Alvis Dare Finch, *Duke*; M.D., *ibid.* (6/8/35); *Int. rotating and in Surg.*, Harper Hospital, Detroit, 6/28/35-6/14/37; *Physician, Emergency Ward Staff*, Detroit City Receiving Hospital, 6/15/37—
- Max Wolff Fischbach, *Catawba*; M.D., *Duke* (6/13/36); *Int., rotating*, Philadelphia Jewish Hospital, 6/15/36-6/30/38; *present address (in practice)*, 1308 Wingohocking St., Philadelphia, Pa.
- John Dean Fitzgerald, *Duke*; M.D., *ibid.* (9/1/34); *Int., rotating and in Surg.*, Watts Hospital, Durham, N. C., 9/1/34-6/30/36; *Ass't. in Gen'l.*, Rainey Hospital, Burlington, N. C., 1/1/36-6/30/37; *Associate*, Alamance General Hospital, Burlington, N. C., 7/1-12/31/37; *present address (in practice)*, Roxboro, N. C.
- John Stewart Forbes, Jr., *Duke*; M.D., *ibid.* (12/18/34); *Int., rotating.*, Jersey City Medical Center, 1/1/35-1/1/36; *Res. in Psychiatry*, New Jersey State Hospital, 2/1/36-12/31/39; *present address (in practice)*, Basking Ridge, N. J.
- William Nicholas Fortescue, *Duke*; M.D., *ibid.* (6/9/34); *Int. and Ass't. Res. in Med.*, Long Island Hospital, Boston, Mass., 7/1/34-5/31/36; *present address (in practice)*, Hendersonville, N. C.
- Herbert Junius Fox, *North Carolina*, *Duke*; M.D., *latter* (8/31/35); *Int. and Ass't. Res. in Med.*, University Hospitals of Cleveland, 11/1/35-6/30/38; *Fellow*, Thorndike Institute of the Boston City Hospital, and *Assoc. Instr. in Med.*, Harvard Medical School, 9/1/38—
- William Penn Frazer, *Richmond*; M.D., *Duke* (9/2/33); *Int., Stud. Health Serv.*, Duke Hospital, 10/1/33-6/30/34; *Int. in Obs. and Gyn.*, Johns Hopkins Hospital, 9/1/34-8/15/35; *Int. in Ped.*, Bellevue Hospital, New York City, 8/15-12/31/35; *present address (in practice)*, Hamilton, Va.
- Gustave Freeman, *Georgia, Brown, Columbia*; M.D., *Duke* (9/2/33); *Int. in Med.*, Duke Hospital, 9/3/33-6/30/34; *Int. and Ass't. Res. in Path.*, New Haven Hospital, and *Ass't. in Path.*, Yale School of Medicine, 7/1/34-12/31/35; *Ass't. in Med.*, Univ. of Chicago Clinics, 1/1/36—
- Robert Carson Fugate, *Washington and Lee, Emory and Henry*, *Duke*; M.D., *Duke* (3/20/37); *Int. in Ped.*, Duke Hospital, 4/1-4/30/37; *Int.*, Manhattan Eye, Ear & Throat Hospital, New York City, 6/1-6/27/37; *Int., rotat.*, Harper Hospital, Detroit, 6/28/37-6/28/38; *Int. and Ass't. Res. in Otolaryn. and Ophthal.*, Duke Hospital, 7/1/38—
- James Francis Fulp, *Vanderbilt*, *Duke*; M.D., *latter* (6/8/35); *Int.*, Goldsboro City Hospital, Goldsboro, N. C., 7/1-8/31/35; *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis Sanatorium, N. C., 9/1-12/31/35; *Int., rotating*, Jersey City Medical Center, Jersey City, N. J., 1/1/36-6/30/37; *present address (in practice)*, Stoneville, N. C.
- Jerome Gaskel, *West Virginia*; med. stud., *ibid.*, 1929-31; M.D., *Duke* (3/22/33); *Int.*, City of Cincinnati General Hospital, 4/1/33-6/30/34; *Ass't. Res.*, Boston Floating Hospital, 10/1/34-9/30/35; *Res. in Surg.*, Huntington Memorial Hospital, Huntington, W. Va., 11/1/35-3/31/36; *present address (in practice)*, Williamson, W. Va.
- Charles Houston Gay, *Duke*; med. stud., North Carolina, 1929-31; M.D., *Duke* (3/22/33); *Int. in Ped.*, New York Hospital, New York City, 3/20-9/30/33; *Int. in Ped.*, New Haven Hospital, 10/1/33-10/31/34; *Ass't. Res. in Ped.*, Duke Hospital, 11/1/34-6/30/36; *in practice*, Martinsburg W. Va., Dec., 1936-May, 1938; *present address (in practice)*, Professional Bldg., Charlotte, N. C.
- Cole Deane Genge, *Ripon, Stanford*; M.D., *Duke* (12/18/34); *Int., rotating*, Hospital of St. Vincent de Paul, Norfolk, Va., 7/1/35-6/30/36; *Int.*, Duke Hospital, 11/17-12/31/36, and *House officer and Res. in Roent.*, Boston City Hospital, 1/1/37—

* See footnote, p. 65.

- Harry-Rolf Germer, *Deutsche Aufhausehule*; med. stud., Jena, 1930-33; M.D., Duke (3/21/36); N. C. State Board of Health, Chapel Hill, N. C., 6/10-9/30/36; *Ass't. Health Officer*, County Health Department, Winston-Salem, N. C., 10/1/36-6/30/37; *Int.*, *Public Health Serv.*, U. S. Marine Hospital, Baltimore, 7/1/37-6/30/38; *Ass't. Health Officer*, Winston-Salem, N. C., 9/1/38—
- William Henry Glass, *Furman*; M.D., Duke (6/7/37); *Int.*, *rotat.*, Sydenham Hospital, New York City, 7/1/37-6/30/39; *Res. in Med.*, Welfare Hospital, Welfare Island, N. Y., 7/1/39—
- Richard Hobart Godwin, *New York, Duke, Illinois*; M.D., Duke (6/9/34); *Int.*, *rotating*, Cumberland Street Hospital, Brooklyn, N. Y., 7/1/34-6/30/36; *Int. and Ass't. Res. in Ped.*, New York Hospital, 7/1/36-6/30/38—
- Thomas Alphonse Gonder, Jr., *Maryland, W. Virginia*; M.D., Duke (6/7/37); *Int. in Med.*, Johns Hopkins Hospital, 9/1/37-8/31/38; *Int.*, *rotat.*, West Baltimore Hospital, 11/21/38-6/30/39; *Ass't. Physician*, Children's Hospital, Boston, 8/1-10/31/39; *Fellow in Med.*, Johns Hopkins Med. School, 11/1/39—
- Abner Gorlain, *New York, North Carolina*; M.D., Duke (9/1/34); *Int.*, Christ Hospital, Cincinnati, O., 9/1/34-8/31/35; *Int. in Surg.*, Bellevue Hospital, 9/1/35-2/29/36; and *Res. in Urol.*, Postgraduate Hospital, New York City, 6/1/36-5/31/37; *present address (in practice)*, Westwood, Calif.
- Aubrey Crafton Gose, *Lincoln Memorial, Emory and Henry*; M.D., Duke (6/7/37); *Int. in Path.*, Washington University Medical School, 7/1/37-5/30/38; *Instructor in Path.*, Washington University School of Medicine and *Res. in Path.*, St. Louis County Hospital, Clayton, Mo., 7/1/38-6/30/39; *Int. in Pub. Health*, U. S. Marine Hospital, Stapleton, Staten Island, N. Y., 7/1/39—
- Robert Williams Graves, *Davidson, Princeton*; M.D., Duke (9/2/33); *Int. and Ass't. Res. in Med.*, New Haven Hospital, 1/1/34-12/31/35; *Postgraduate work*, National Hospital, London, Eng., 1/1-6/30/36; *Instr. in Med. and Anat.*, and *Assoc. in Neurol.*, Duke University School of Medicine, 7/1/36—
- Cyrus Leighton Gray, Jr., *High Point*; M.D., Duke (6/7/37); *Int. in Surg.*, Duke Hospital, 7/1/37-5/21/38); *Ass't. Phys.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 6/1/38—
- Jack Greenfield, *Johns Hopkins*; M.D., Duke (8/31/35); *Int. in Surg.*, Duke Hospital, 9/1/35-6/30/36; *Int.*, *rotating*, Flower and Fifth Avenue Hospital, 7/1/36-6/30/37; and *Res. in Surg.*, York Hospital, New York City, 7/15/37-5/31/38; *Ass't. Res. in Surg.*, Starling Loving Hospital, Ohio State University, Columbus, Ohio, 6/15/38—
- Charles Edgar Haines, Jr., *Rutgers, Duke*; M.D., latter (6/7/37); *Int. in Med.*, Baltimore City Hospitals, 7/1/37-6/30/38; *Int. in Surg. and in Urol.*, Duke Hospital, 7/1/38—
- William Lorenz Haltom, *Hendrix, Alabama*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int. in Surg. and Ass't. Res. in Urol.*, Duke Hospital, 7/1/32-11/30/33; *Res.*, Presbyterian Hospital, Chicago, Ill., 1/1-12/31/34; *Ass't. Res. and Res. in Urol.*, Duke Hospital, 1/1/35-12/31/36; *present address (in practice)*, City Hospital, Martinsburg, W. Va.
- Robert Albert Hare, *Ohio State*; M.D., Duke (9/1/34); *Int. in Med.*, French Hospital, New York City, 9/1/34-6/10/35; *Int.*, *Ass't. Res. and Ass't. Mel-lon Fellow in Ophthal.*, Johns Hopkins Hospital, 9/1/35—
- George Thomas Harrell, Jr., *Duke*; M.D., *ibid.* (6/13/36); *Int. in Med. and Jr. Ass't. in Path.*, Duke Hospital, 7/1/36-12/17/37; *Director of Laboratories and Pathologist*, City Memorial Hospital, Winston-Salem, N. C., 12/18/37-6/30/38; *Ass't. Res. in Med.*, Duke Hospital, 7/1/38—

* See footnote, p. 65.

- H. Patterson Harris, Jr., *Yale*; M.D., Duke (3/21/36); *Int. in Surg. and Neuro-Surg.*, Massachusetts General Hospital, Boston, 4/15-12/31/36; *House Officer, rotating*, Faulkner Hospital, Boston, 7/1/37-10/15/38; *Ass't. in Surg.*, Bridgeport Hospital, Bridgeport, Conn., 2/16-12/31/39; *Ass't. Sup't.*, Worcester City Hospital, Worcester, Mass., 5/1/39—
- Harold Ira Harvey, *Harvard*; M.D., Duke (6/7/37); *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/37—
- Walter Thalman Hasler, Jr., *Brigham Young*; med. stud., Utah, 1929-31; M.D., Duke (3/22/33); *Int., rotating*, Church Home & Infirmary, Baltimore, Md., 7/1-6/30/34; *Ass't. Res. and Res. in Otolaryn.*, Duke Hospital, 7/1/34-6/30/36; *present address (in practice)*, Everett, Wash.
- George Heinitsh, *North Carolina*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int. in Surg., Ass't. Res. in Priv. Diag. Clinic, and Ass't. Res. and Res. in Otolaryn.*, Duke Hospital, 7/1/32-3/31/37; *in practice*, Logan, West Va., March, 1937-Aug., 1938; *present address (in practice)*, Fayetteville, N. C.
- Alfred Faxon Henderson, *Jaliet Junior, Duke*; M.D., latter (6/7/37); *Int., rotat.*, Emergency Hospital & Central Dispensary, Washington, D. C., 7/1/37-6/30/38; *Int. in Surg. and in Path.*, *Duke Hospital*, 7/1/38—
- Marvin S. Herrington, *Duke*; M.D., *ibid.* (3/20/37); *Int.*, N. C. State Sanatorium, 3/22-6/15/37; *Int., rotat., Res. in Med., Ass't. Res. and Res. in Surg.*, Norfolk General Hospital, Norfolk, Va., 7/1/37—
- Harry Myer Holtz, *Ohio State, Calumbia, Duke*; M.D., Duke (6/8/35); *Int., rotating*, Newark Beth Israel Hospital, Newark, N. J., 1/1-12/31/36; *Ass't. in Eye Clinic*, St. Michael's Hospital, Newark, 1/7-9/30/37; *Pastgraduate work*, Royal London Ophthalmic Hospital, London, 9/25/37-2/28/38; *Pastgraduate work*, Union Eye Clinic, Debrecen, Hungary, 3/1-4/30/38; *Eye service*, St. Michael's Hospital, Newark, N. J., 5/15/38-6/30/38; *present address (in practice)*, Newark, N. J.
- Harold MacLachlan Horack, *Duke, Iowa*; M.D., former (3/20/37); *House Officer in Med.*, Peter Bent Brigham Hospital, Boston, 6/15/37-2/28/39; *Res. in Path.*, Boston City Hospital, 3/1-6/30/39, and Hospital of University of Pennsylvania, and *Ass't. Instr. in Path.*, University of Pennsylvania School of Medicine, 7/1/39—
- Newton Hornick, *Catawba*; M.D., Duke (6/7/37); *Int., rotat., Ambulance Service, and Ass't. Res. and Res. in Raent.*, Long Island College Hospital, 7/1/37—
- Jay Leonard Hutchison, *Marshall*; M.D., Duke (12/19/33); *Int. in Surg.*, Duke Hospital, 1/1-6/30/34; *Res.*, N. C. Orthopedic Hospital, Gastonia, N. C., 7/1/34-6/30/35; *Res. in Orth.*, Duke Hospital, 7/1/35-2/29/36; *Res.*, N. C. Orthopedic Hospital, 3/1-3/15/36; *Res. in Orth.*, Univ. of Virginia Hospital, 3/16-5/31/36; and Logan General Hospital, Logan, W. Va., 6/1/36-5/31/37; *present address (in practice)*, Huntington, W. Va.
- Arthur M. Jenkins, *Springfield, Simpsan*; M.D., Duke (12/20/35); *Int., rotating and Ass't. Res. in Ped.*, Union Memorial Hospital, Baltimore, Md., 1/1/36-6/30/37; *Ass't. Res. in Med.*, Medical College of Virginia Memorial Hospital, Richmond, Va., 7/1/37-6/30/38; *present address (in practice)*, Frenchtown, N. J.
- Raymond Taylor Jenkins, *North Carolina*; M.D., Duke (6/8/35); *Int. in Surg.*, Duke Hospital, 7/1-11/24/35; *Int. and Ass't. Phys.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 4/1/36-10/31/37; *Ass't. Phys.*, Western N. C. Sanatorium, Black Mountain, N. C., 11/1-12/31/37; *Clinic Phys.*, N. C. Sanatorium, Sanatorium, N. C., 1/1/38-2/28/39; *First Lieut.*, Station Hospital, U. S. Army Med. Corps, Station Hospital, Fort Bragg, N. C., 3/10-6/30/39, and Army Medical College, Washington, D. C., 7/1/39—

* See footnote, p. 65.

- Julia Mary Jones, *Denison, Ohio State*; M.D., Duke (3/21/35); *Int. in Med.*, Johns Hopkins Hospital, 3/22-6/30/35; *Vol. Ass't.*, New York State Hospital, Raybrook, N. Y., 9/1-12/31/35; *Ass't. in Anat.*, Duke Med. Sch., and *Int. and Ass't. Res. in Mcd.*, Duke Hospital, 1/1/36-12/31/37; *Ass't.* William H. Maybury Sanatorium, Northville, Mich., 1/1/38-6/30/39; *Res. in Med.*, Bellevue Hospital, New York City, 7/1/39—
- Roderic Orlando Jones, *Johns Hopkins, John B. Stetson*; M.D., Duke (12/20/35); *Int. in Med.*, University of Chicago Clinics, 1/1-12/31/36; *Int.*, Baker Sanatorium, Lumberton, N. C., 1/1/37-2/28/38; *Stud. in N. C. State Pub. Health Serv.*, Chapel Hill, N. C., 3/7-6/30/38; *present address (in practice)*, Burnsville, N. C.
- Austin Louis Joyner, *Millsaps, Tulane*; M.D., Duke (9/1/34); *Int.*, rotating, Goldsboro City Hospital, Goldsboro, N. C., 9/1-9/30/34; *Fellow in Bact. and Int. in Med.*, Duke Hospital, 10/1/34-6/30/36; *Ass't. in Path. and Bact.*, Rockefeller Institute, 7/1/36-6/30/38; *Ass't. Prof. of Bact. and Path.*, University of Alabama School of Medicine, Tuscaloosa, Ala., 9/1/38-7/31/39; *Medical Staff*, Lederle Laboratories, New Orleans, 9/1/39—
- George William Joyner, *Wake Forest*; med. stud., *ibid.*, 1928-30; M.D., Duke (6/11/32); *Int.*, *Ass't. Res. and Res. in Surg.*, Duke Hospital, 7/1/32-8/31/38; *present address (in practice)*, Asheboro, N. C.
- Rayburn Nelson Joyner, *Wake Forest*; M.D., Duke (9/2/33); *Junior and Senior Int.*, rotating, Jacksonville Duval County Hospital, Jacksonville, Fla., 9/3/33-6/30/35; *in practice*, Hastings, Fla., 7/1/35-6/30/36; *Director*, Bureau of Maternal and Child Health, Jacksonville, Fla., 9/1/36—
- William Henry Kaufman, *Johns Hopkins*; M.D., Duke (9/4/37); *Int.*, N. C. State Sanatorium, 9/29/37-10/30/37; *Int. and Ass't. Res. in Mcd.*, Duke Hospital, 11/1/37-11/30/39; *Ass't. Res. in Derm. and Syphil.*, Univ. of Va. Hospital, 1/1/40—
- William Paul Kavanagh, *Wheaton*; M.D., Duke (8/31/35); *Int.*, rotating, Highland Park General Hospital, Detroit, 7/1/36-6/30/37; *Ass't. Res. in Surg.*, Watts Hospital, Durham, N. C., 7/1/37-6/30/38; *present address (in practice)*, Cooleemee, N. C.
- Charles Mattox Kendrick, *Duke*; med. stud., *ibid.*, North Carolina, 1929-31; M.D., Duke (6/10/33); *Int.*, Wheeling Hospital, Wheeling, W. Va., 7/1/33-6/30/34; *Ass't. to Dr. W. P. Sammons*, Wheeling, 7/1/34-6/30/36; *Senior Int.*, *Ass't. Res. and Res. in Med.*, Medical College of Virginia Memorial Hospital, Richmond, Va., 10/1/36-6/30/39; *present address (in practice)*, Valdesse, N. C.
- Beverley Randolph Kennon, III, *Virginia, William and Mary*; M.D., Duke (9/1/34); *Int. in Med.*, Johns Hopkins, 9/1/34-8/31/35; *Int. in Ophth.*, and *Junior House Surgeon*, New York Eye & Ear Infirmary, 10/1/35-12/31/38; *present address (in practice)*, Norfolk, Va.
- Jeremiah Wolfe Kerner, *Georgia*; M.D., Duke (9/5/36); *Int.*, rotating, and *Maternity Service*, Los Angeles County Hospital, 10/1/36-12/26/37; *Res.*, *Outside Obs.*, Los Angeles County Hospital, 12/27/37-6/30/38; *Res.*, Rancho Los Amigos, Hondo, Calif., 7/1/38-6/30/39; *Med. Director*, American House (branch, Los Angeles County Hospital), 7/5/39—
- Thomas DeArman Kinney, *Pennsylvania*; M.D., Duke (9/5/36); *Int. in Med. and in Urol.*, Johns Hopkins Hospital, 9/6/36-8/31/38; *Ass't. in Path.*, Yale Medical School, and *Int. in Path.*, New Haven Hospital, 9/1/38-8/31/39; *Ass't. Res. in Path.*, Mallory Institute of Pathology, Boston City Hospital, 9/1/39—
- Orrin Frank Kleckner, *Buffalo, Duke*; med. stud., Vanderbilt, 1929-31; M.D., Duke (12/21/32); *Int. and Ass't. Res. in Med.*, Millard Fillmore Hospital, Buffalo, N. Y., 7/1/33-2/26/35; *Res. in Med.*, Pontiac General Hospital, Pontiac, Mich., 2/27/35-6/30/36; *present address (in practice)*, Seco, Ky.

* See footnote, p. 65.

- Frederick Robert Klenner, *St. Vincent, St. Francis, Catholic*; M.D., Duke (3/21/36); *Int.*, Goldsboro City Hospital, Goldsboro, N. C., 4/1-8/31/36; Moore County Hospital, Inc., Pinehurst, 9/1/36-6/30/37; and N. C. State Sanatorium, Sanatorium, N. C., 10/1/37-4/30/38; *Ass't. Phys.*, Forsyth County Sanatorium, Winston-Salem, N. C., 5/10/38-3/31/39; *present address (in practice)*, Reidsville, N. C.
- Charles Edward Leach, *Johns Hopkins, Duke*; M.D., latter (6/8/35); *Int.*, *rotating*, *and Res. in Med.*, San Diego County General Hospital, 9/1/35-8/31/36; *Ass't. Res. in Med.*, Duke Hospital, 9/1/36-8/31/37; and University of Cleveland Hospitals, 9/1/37-8/31/38; *Res. in Cardiol.*, Massachusetts General Hospital, 9/1/38—
- Albert Francis Lee, *Washington, College of Puget Sound*; M.D., Duke (12/18/37); *Int.*, U. S. Public Health Service, U. S. Marine Hospital, Baltimore, Md., 7/1/37-6/30/38; *Int. in Obs.*, Duke Hospital, 7/1/38—
- William Arthur Leff, *Franklin and Marshall*; M.D., Duke (12/19/36); *Int.*, *rotating*, Essex County Hospital for Contagious Diseases, Belleville, N. J., 1/1-3/31/37; and Newark City Hospital, 4/1/37-3/31/39; *present address (in practice)*, 299 Clinton Ave., Newark, N. J.
- David Washington Lester, *Wichita*; M.D., Duke (6/8/35); *Int.*, *rotating*, *and Res. in Med.*, San Diego County General Hospital, San Diego, Cal., 7/1/35-6/30/37; *Res. in Neuropsychiatry*, Compton Sanatorium, Compton, Cal., 7/1/37-6/30/39; *Res. in Neuropsychiatry*, Duke Hospital, 7/1/39—
- Gerald Clellan Lewis, *Berea, Carson-Newman*; med. stud., Tennessee, 1929-31; M.D., Duke (3/22/33); *Int.*, *rotating*, Pasadena Hospital, Pasadena, Cal., 10/15/33-7/15/34; *Int. and Res.*, *rotating*, St. Joseph's Hospital, Phoenix, Ariz., 11/20/34-11/27/36; *in practice*, Kenvir, Ky., 11/1/37-7/12/38; *present address (in practice)*, Chloride, Ariz.
- John Fletcher Lovejoy, *Emory*; med. stud., Alabama, 1928-30; M.D., Duke (6/11/32); *Int. in Med.*, Duke Hospital, 7/1/32-6/30/33; *Int. in Orth.*, Shriners Hospital, Springfield, Mass., 7/8/33-6/30/34; *Fellow and Ass't. in Orth.*, Dr. William C. Campbell Clinic, Memphis, Tenn., 7/1/34-6/30/36; *present address (in practice)*, 1022 Park Ave., Jacksonville, Fla.
- Durward Lee Lovell, *Birmingham-Southern, Alabama*; med. stud., latter, 1929-31; M.D., Duke (12/19/36); *Int. and Ass't. Res. in Surg.*, Duke Hospital, 7/1/38—
- Hugh Alexander McAllister, *Davidson, North Carolina*; med. stud., latter, 1933-35; M.D., Duke (6/7/37); *Int.*, *rotat.*, Emergency Hospital & Central Dispensary, Washington, D. C., 7/1/37-6/30/38; *1st. Lieut.*, Reserve Corp, Walter Reed Hospital, Washington, D. C., 7/1/38-6/30/39; *present address (in practice)*, Lumberton, N. C.
- Joseph Pickett McCracken, *Duke*; M.D., *ibid.* (9/4/37); *Int. in Path.*, *and in Med.*, Baltimore City Hospitals, 10/11/37-6/30/39; *Ass't. Res. in Med.*, Grady Hospital, Atlanta, Ga., 7/1/39—
- Bernyrd Carlisle McLawhorn, *Furman*; M.D., Duke (6/8/35); *Int. and Res.*, *rotating*, Hospital of St. Vincent de Paul, Norfolk, Va., 7/1/35-6/30/37; *present address (in practice)*, Greenville, S. C.
- Robert Lindsay McMillan, *Davidson, North Carolina*; M.D., Duke (9/2/33); *Int. in Med.*, University Hospitals of Cleveland, 9/3/33-6/30/34; *Ass't. Res. in Med. and in Bact.*, *and Res. in Med.*, Duke Hospital, 11/1/34-7/31/37; *present address (in practice)*, Winston-Salem, N. C.
- Philip Joseph McNamara, *Holy Cross, Georgetown*; spec. med. stud., latter 1927-31; and S. S., Harvard, 1929; M.D., Duke (9/5/36); *Int.*, *rotating*, Georgetown University Hospital, 9/6/36-8/31/37, and U. S. Naval Hospital, Washington, D. C., 9/1/37-8/31/38; *Ass't. Res. in Urol.*, U. S. Naval Hospital, Washington, D. C., 9/1/38—

* See footnote, p. 65.

- George Kenneth Mahl, *Ohio State, Duke*; M.D., latter (3/21/34); *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 3/22-6/1/34; *Int.*, rotating, Christ Hospital, Jersey City, N. J., 7/1/34-6/30/35; *Int.* in *Obs. and Gyn.*, Duke Hospital, 7/1-11/20/35; *Senior Int.*, rotating, Christ Hospital, 12/1/35-3/31/36; *present address (in practice)*, Ironton, O.
- Samuel Jeremiah Margolin, *Duke*; M.D., *ibid.* (3/21/34); *Int.*, rotating, Jersey City Medical Center, 3/22/34-6/30/35; *Res. in Otolaryn.*, Beth Israel Hospital, 7/1/35-6/30/36; *present address (in practice)*, Union City, N. J.
- Donald Feige Marion, *Duke*; M.D., *ibid.* (8/31/35); *Int. in Med.*, and *Ass't. and Assoc. in Gastro-Enterology*, Henry Ford Hospital, Detroit, 9/1/35—
- Anthony Ralph Marsicano, *Long Island*; M.D., *Duke* (3/20/37); *Int. in Surg.*, McGuire Clinic, Richmond, Va., 3/21-6/20/37; *Int.*, rotat., Bushwick Hospital, Brooklyn, N. Y., 7/1/37-6/30/39; *present address (in practice)*, Coolidge, Ga.
- David William Martin, *Duke*; M.D., *ibid.*, (6/7/37); *Int. in Med.*, Baltimore City Hospitals, 7/1/37-6/30/38; *Int.*, *Ass't. Res. and Res. in Ped.*, Duke Hospital, 7/1/38—
- James Risto Martin, *Vanderbilt, Alabama*; med. stud., latter, 1933-35; M.D., *Duke* (3/20/37); *Int. in Surg.*, Baltimore City Hospitals, 3/21-6/30/37; *Int.*, rotat., University Hospitals, St. Louis University School of Medicine, 7/1/37-6/30/38; *Int.*, Baltimore City Hospitals, 7/1/38-6/30/39, and *Ass't. Res. in Surg.*, University Hospital, Baltimore, 7/1/39—
- George Kemp Massengill, Jr., *Duke*; M.D., *ibid.* (6/13/36); *Int. in Surg.*, Henry Ford Hospital, Detroit, 7/1/36-6/30/37; *Senior Int. in Surg.*, Henry Ford Hospital, 9/1/37-8/31/38; *Res.*, general, Martinsburg City Hospital, Martinsburg, West Va., 9/1/38-1/15/39; *Sen. Int.*, *Pub. Health Serv.*, U. S. Marine Hospital, Detroit, 1/16-7/31/39; *Ass't. Surgeon, Pub. Health Service*, Federal Reformatory, Chillicothe, Ohio, 8/1/39—
- Elijah Eugene Menefee, Jr., *Virginia*; M.D., *Duke* (6/13/36); *Int.*, New York State Sanatorium, Raybrook, N. Y., 7/1-8/31/36; *Int. in Med.*, Duke Hospital, 9/1/36-6/30/37; *Research Fellow in Med. and Bact.*, Duke Medical School, 7/1/37-6/30/38; *Res. in Tbc.*, Bellevue Hospital, New York City, 1/1/39—
- Robert Felton Mikell, *John B. Stetson, Georgia*; M.D., *Duke* (12/19/33); *Int.*, *Ass't. Res.*, *Res. and Instr. in Ped.*, Strong Memorial Hospital, Rochester, N. Y., 9/1/33-6/30/36; *Int.*, Iola Sanatorium, Rochester, N. Y., 7/1/36-11/30/36; *Voluntary Ass't.*, State Tuberculosis Sanatorium, Alto, Ga., 9/1/39—
- Ben Neely Miller, Jr., *Duke*; M.D., *ibid.* (6/8/35); *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/35-6/30/37; *Instr. in Phys. Diag. and Ass't. in Chem.*, University of Alabama Medical School, 9/1/37-6/30/38; *present address (in practice)*, Columbia, S. C.
- Charles Francis Montgomery, *Drury, Missouri*; med. stud., latter, 1929-31; M.D., *Duke* (3/22/33); *Int. in Surg. and Ass't. Res. and Res. in Orth. and Surg.*, Henry Ford Hospital, Detroit, Mich., 9/1/33-8/31/37; *Voluntary Ass't. in Otolaryn.*, Duke Hospital, 9/1-12/31/37; *present address (in practice)*, Houston, Texas.
- Frank Richardson Moore, *Duke*; M.D., *ibid.* (6/7/37); *Int.*, Woman's Hospital, Baltimore, 7/1/37-6/30/38; *Ass't. Res. and Res. in Med.*, Hospital for Women of Maryland, Baltimore, 7/1/38—
- Arch Sherrod Morrow, *Davidson*; M.D., *Duke* (12/19/36); *Int.*, rotating, Church Home and Infirmary, Baltimore, 12/28/36-6/30/37; and Presbyterian Hospital, Chicago, 7/1/37-10/31/38; *Instr. in Phys. Diag.*, University of Alabama School of Med., 12/1/38—

* See footnote, p. 65.

- Vince Moseley, *Clemson, Duke*; M.D., latter (12/19/36); *Int.*, N. C. State Sanatorium, Sanatorium, N. C., 1/1-4/15/37; and Sydenham Hospital, Baltimore, 5/1-6/30/37; *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/37-3/31/39; *Fellow in Derm. & Syphil.*, 4/1-12/31/39, and *Ass't. in Physiol.*, Duke University School of Med., 4/1/40—
- Robert McGee Mullen, II, *Pittsburgh*; M.D., Duke (9/1/34); *Int. in Path.*, Baltimore City Hospitals, 9/1/34-8/31/35; *Int. in Obs.*, Johns Hopkins Hospital, 9/1/35-8/31/36, and Boston Lying-in Hospital, Boston, Mass., 9/1-12/31/36; *present address (in practice)*, Pasadena, Cal.
- Henry Stokes Munroe, Jr., *Davidson*; M.D., Duke (6/8/35); *Int. in Med.*, and *Int. and Ass't. Res. in Surg.*, Duke Hospital, 7/1/35-6/30/38; *Fellow in Surg.*, Lahey Clinic, Boston, Mass., 9/1/38-8/31/39; *Ass't. in Anat.*, Duke University School of Medicine, Oct., 1939—
- Philip Naumoff, *Pittsburgh*; M.D., Duke (6/7/37); *Int.*, *rotat.*, University of Pittsburgh Hospital, 7/1/37-6/30/38; *Res.*, *general*, Bradford Hospital, Bradford, Pa., 8/1/38-7/31/39; *present address (in practice)*, Charlotte, N. C.
- Arthur Neumaier, *Columbia*; M.D., Duke (6/8/35); *Int. in Ped.*, University of Chicago Clinics, 7/1/35-5/31/36; *1st. Lieut., Med. Reserve*, C. C. C., Aberdeen, N. C., 6/1-11/30/36; *Int.*, *rotating*, St. Mary's Hospital, Duluth, Minn., 1/1-9/6/37; *Res.*, *rotating*, Raiter Hospital and Clinic, Cloquet, Minn., 9/7-12/31/37; *present address (in practice)*, Lindstrom, Minn.
- Walter Relfe Newbern, *Duke*; M.D., *ibid.* (6/7/37); *Int. in Med.*, Vanderbilt University Hospital, 7/1/37-6/30/38; *Int. in Surg.*, Duke Hospital, 7-1-38-6/30/39; *Res.*, *rotat.*, Elizabeth Buxton Hospital, Newport News, Va., 7/1/39—
- Richard Elwood Nitschke, *Duke*; M.D., *ibid.* (6/7/37); *Int. in Med.*, United Hospital, Port Chester, N. Y., 7/1/37-6/30/38; *Int. in Surg.*, Roosevelt Hospital, New York City, 7/1/38—
- Carlton Lee Ould, *Roanoke, Duke*; M.D., latter (3/20/37); *Int. in Med.*, Duke Hospital, 3/21/37-6/30/38; *Int. in Path.*, Rhode Island Hospital, Providence, R. I., 7/1/38-6/30/39; *Int. in Roentgen.*, Duke Hospital, 9/1/39—
- Francis Leroy Owens, *Pittsburgh*; M.D., Duke (9/1/34); *Int. in Surg.*, Duke Hospital, 9/1-12/31/34; *Int.*, *rotating*, Moore County Hospital, Inc., Pinehurst, N. C., 1/6/35-8/31/36; *present address (in practice)*, Pinehurst, N. C.
- Daniel Jack Pachman, *New York, North Carolina*; M.D., Duke (9/1/34); *Int. in Ped.*, University of Chicago Clinics, 9/1/34-8/31/35; *Int.*, *in Ped.*, New York Hospital, 9/1/35-6/30/36; *Ass't. Res. in Ped.*, Duke Hospital, 7/1/36-6/30/37; *Instr. in Ped.*, University of Chicago Clinics, 7/1/37—
- Edward Frost Parker, Jr., *South Carolina*; M.D., Duke (9/2/33); *Int. in Surg.*, Strong Memorial Hospital, Rochester, N. Y., 9/3/33-6/30/34; and Vanderbilt Univ. Hospital, 7/1/34-6/30/35; *Ass't. Res. in Surg.*, University of Virginia Hospital, 7/1/35-6/30/36; *Ass't. in Surg.*, Vanderbilt University Medical School; *Ass't. Res. and Res. in Surg.*, Vanderbilt University Hospital, 7/1/36-6/30/39; *present address (in practice)*, 70 Hasell St., Charleston, S. C.
- Philip Brower Parsons, *Duke*; M.D., *ibid.* (3/21/36); *Int. in Surg.*, and *Int. and Jr. Ass't. in Path.*, Duke Hospital, 7/1/36-6/30/38; *Res. in Roent.*, Duke Hospital, 7/1/38—
- Archibald Hanes Pate, *Duke*; M.D., *ibid.* (6/7/37); *Int. and Ass't. Res. in Surg. and Res. in Ped.*, Henry Ford Hospital, Detroit, 7/1/37—
- Talmage Lee Peele, *Duke*; med. stud., Vanderbilt, 1929-31; M.D., Duke (6/9/34); *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/34-6/30/36; *Int. and Res. in Neurol.*, Bellevue Hospital, New York City, 7/1/36-6/30/37; *Ass't. in Anat.*, Johns Hopkins Medical School, 9/1/37-8/31/38; *Instr. in Anat.*, Univ. of Rochester Medical School, 9/1/38-7/31/39; *Instr. in Anat.*, Duke Univ. School of Medicine, 8/15/39—

* See footnote, p. 65.

- William Phillips, *Ohio State*; M.D., Duke (9/5/36); *Int., rotat.*, Harper Hospital, 9/20/36-9/19/37; *Jr. Res. in Path.*, Detroit Receiving Hospital, Detroit, 10/18/37-6/30/38; *Sr. Int. in Med.*, Harper Hospital, Detroit, 6/1-9/30/38; *present address (in practice)*, West Toledo, Ohio.
- Michael Theodore Pishko, *Pittsburgh*; M.D., Duke (6/13/36); *Int., rotating*, Pittsburgh Hospital, 7/1/36-6/30/37; *Int. and Res.*, Moore County Hospital, Inc., Pinelhurst, N. C., 7/1/37—
- Marion Timothy Plyler, Jr., *North Carolina State, Duke*; M.D., *ibid.* (12/19/33); *Int.*, N. C. Sanatorium for the Treatment of Tuberculosis, Sanatorium, N. C., 1/1-6/1/34; *Int., rotating*, Hospital of St. Vincent de Paul., Norfolk, Va., 7/1/34-6/30/35; *Int.*, N. C. Sanatorium, 7/1/35-3/31/36; *Ass't. Director*, N. C. Public Health Service, 5/1/36-4/30/37; *present address (in practice)*, Nashville, N. C.
- Ramond Woodrow Postlethwait, *West Virginia*; med. stud., *ibid.*, 1933-35; M.D., Duke (3/20/37); *Int.*, N. C. State Sanatorium, 4/1-6/30/37; *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/37-7/31/39; *Int. in Surg.*, Henry Ford Hospital, 9/1/39—
- John Fairman Preston, Jr., *Davidson*; M.D., Duke (6/8/35); *Int., rotating*, Piedmont Hospital, Atlanta, Ga., 7/1/35-6/30/36, and in *Path.*, Duke Hospital, 7/1/36-6/30/37; *Gen'l. Ass't.*, Alexander Hospital, Soonchun, Korea, 9/1/37-8/31/39; *present address (in practice)*, Kwanju, Korea.
- Leo Bernard Provinsky, *Grove City*; M.D., Duke (12/19/36); *Int.*, City Hospital, Martinsburg, W. Va., 12/23/36-12/23/37; *Int. and Res. in Med.*, Duval County Hospital, 1/1/38-6/30/39, and *present address (in practice)*, Jacksonville, Fla.
- Robert Harry Pudenz, *Dayton*; M.D., Duke (6/8/35); *Voluntary Ass't. in Neurol.*, National Hospital, London, England, 7/1-12/15/35; *Int. in Surg.*, Duke Hospital, 1/1-9/30/36, and in *Neuro-Surg.*, Royal Victoria Hospital, Montreal, Canada, 10/1/36—
- Richard Zimri Query, Jr., *Davidson*; M.D., Duke (9/1/34); *Int., rotating*, Henry Ford Hospital, Detroit, 9/1/34-8/31/35; *Ass't. Res. and Res. in Med.*, Duke Hospital, 10/1/35-6/30/38; *present address (in practice)*, Charlotte, N. C.
- Raymond Hamilton Ralston, *State Teachers, Geneva*; M.D., Duke (9/1/34); *Int., rotating*, Postgraduate Hospital, Univ. of Pennsylvania, 9/1/34-6/30/36; *Med.*, R. O. C., Carlisle, Pa., 7/5-7/18/36; *present address (in practice)*, Lakeland, Fla., and on staff of *Dept. of Med.*, Morrell Memorial Hospital, Lakeland, Fla.
- Lester Paul Rasmussen, *Snow, Utah*; med. stud., latter, 1931-33; M.D., Duke (6/8/35); *Int., rotating*, Salt Lake General Hospital, 7/1/35-6/30/36; *Int.*, University of Chicago Clinics, 7/1/36-6/30/37, and *Ass't. Res. and Res. in Ped.*, Duke Hospital, 7/1/37-6/30/38; *present address (in practice)*, Salt Lake City, Utah.
- Howard Lorenzo Reed, *Duke*; M.D., *ibid.* (9/5/36); *Int.*, N. C. State Sanatorium, 10/1-11/30/36; *Int. in Med.*, Roosevelt Hospital, New York City, 1/1/37-6/30/39; *present address (in practice)*, 136 East 64th St., New York, N. Y.
- Paul Gerhard Reque, *Duke*; M.D., *ibid.* (9/2/33); *Int. and Ass't. Res. in Med.*, Duke Hospital, 9/1/33-6/30/35; *Ass't. Res. in Med.*, Lakeside Hospital, Cleveland, O., 7/1/35-6/30/36; *Instr. and Med. Ass't.*, Yale University, 7/1/36—
- Edwin Tyson Ricketts, *Georgia School of Technology, Millsaps, Duke*; M.D., Duke (3/21/36); *Int.*, N. C. State Sanatorium, 3/22-5/12/36; *Int., rotating*, Central Dispensary & Emergency Hospital, Washington, D. C., 7/1/36-6/30/37; *Int. in Med.*, Church Home and Infirmary, Baltimore, 7/1/37-6/30/38; *Ass't. Res. in Biochem.*, Duke Medical School, 7/1/38-1/31/39; *Res. in Med.*, Gorgas Hospital, Ancon, Panama Canal Zone, 2/1-7/31/39; *Physician*, Chiriqui Land Co. Hospital, Puerto Armuelles, Repub. of Panama, 8/15/39—

* See footnote, p. 65.

- Louis Carroll Roberts, *Davidson*; M.D., Duke (9/2/33); *Int. in Surg. and in Path., Ass't. Res. in Surg. and Res. in Urol.*, Duke Hospital, 9/1/33—
- Dennis Hardesty Robinson, *W. Va.*; med. stud., *ibid.*, 1929-31; M.D., Duke (3/21/35); *Int., rotating*, Baker Sanatorium, Lumberton, N. C., 4/15/36-6/30/36; *Res., rotating*, Huntington Memorial Hospital, 12/1/36-6/30/37, and *Physician*, National Elks Home, Bedford, Va., 7/1/37-12/31/37; *present address (in practice)*, Bedford, Va.
- Frank Hurd Robinson, Jr., *Michigan*; M.D., Duke (6/8/35); *Int. in Med.*, Duke Hospital, 7/1/35-6/30/36; *Field Work, U. S. P. H. Serv.*, Mecklenburg Co., N. C., 7/1-12/31/36; *Int. in Ped.*, Johns Hopkins Hospital, 1/1-6/30/37; *Ass't. Res. in Med.*, Rockefeller Institute Hospital, New York City, 7/1/37-6/30/39; *present address (in practice)*, Jamestown, N. Y.
- Kenneth Brown Rothey, *Pittsburgh*; med. stud., West Va., 1929-31; M.D., Duke (12/19/33); *Int., rotating*, Fitkin Memorial Hospital, Neptune, N. J., 1/1/34-6/30/35; *Res. in Surg. and Obs.* Somerset Hospital, Somerville, N. J., 7/1/35-3/3/36; *deceased*.
- Nathan Ruby, *New York, Virginia*; M.D., Duke (9/2/33); *Int. in Med.*, Sinai Hospital, Baltimore, Md., 7/1/33-6/30/34; *Ass't. Res. and Res. in Ped.*, Jewish Hospital, Brooklyn, 7/1/34-6/30/37; *Int., Res. in Communicable Dis.*, Kingston Ave. Hospital, Brooklyn, 7/1-12/31/37; *present address (in practice)*, 1810 Avenue N, Brooklyn, N. Y., 1/1/38, and *Ass't on Ped. Serv.*, Jewish Hospital, Brooklyn, N. Y., 7/6/38—
- Edwin Macrae Rucker, *Randolph-Macon*; M.D., Duke (9/1/34); *Int., in Med., and Int. and Ass't. Res. in Obs. & Gyn.*, Duke Hospital, 9/1/34—
- Socrates Rumpas, *Alabama*; med. stud., *ibid.*, 1933-35; M.D., Duke (3/20/37); *Int. in Med.*, Baltimore City Hospitals, 3/25-6/25/37; *Int., rotat.*, University of Maryland Hospital, Baltimore, 7/1/37-6/30/38; *Int., rotat.*, City Hospital, Mobile, Ala., 7/1/38-6/30/39; *present address (in practice)*, Mobile, Ala.
- Louis John Saxe, *John Carroll, Duke*; M.D., *ibid.* (9/1/34); *Int. Stud. Health Serv.*, Duke Hospital, 9/1/34-6/30/35; *Res. in Neuro. and Psychiatry*, Univ. of Virginia Hospital, 7/1/35-9/22/36; *Ass't. Sup't. and Supt.*, Arizona State Hospital, Phoenix, Ariz., 3/1/37—
- Eugene Neston Scadron, *Dartmouth, Yale*; M.D., Duke (9/1/34); *Fellow in Med. and Int. in Surg.*, Duke Hospital, 10/1/34-6/30/36; *Int. and Research Ass't. in Obs. & Gyn.*, Bellevue Hospital, New York City, 7/1/36-2/28/38; *Ass't. Res., Res. and House Officer*, Boston Lying-in Hospital, Boston, 3/1/38—
- Ralph Ernest Schmidt, *Pittsburgh*; M.D., Duke (6/8/35); *Int., rotating*, Hamot Hospital, Erie, Pa., 7/1/35-6/30/36; *Int. in Neuro-Surg.*, Massachusetts General Hospital, Boston, 7/1-9/30/36; *Int., gen'l.*, House of Good Samaritan, Boston, 4/1-6/30/37; *present address (in practice)*, Wesleyville, Pa., and *Ass't. in Med.*, Hamot Hospital, Erie, Pa.
- William Schulze, *Tulane, Richmond*; M.D., Duke (6/13/36); *Int. and Ass't. Res. in Med.*, Duke Hospital, 7/1/36—
- William Osce Self, *Furman*; M.D., Duke (6/7/37); *Int.*, Johns Hopkins Hospital, 9/1/37-8/31/38, and *Ass't. Res. in Surg. and Ass't. Surgeon*, Palmerston Hospital, Palmerton, Pa., 9/1/38—
- Walter Eugene Sharpe, Jr., *Duke*; M.D., *ibid.* (9/1/34); *Int. and Ass't. Res., rotating, and Ass't. Res. in Urol.*, Henry Ford Hospital, Detroit, 9/1/34-2/28/37; *Ass't. Surg., U. S. Public Health Service*, Marine Hospital, Detroit, 3/1/37—
- James Edward Sheehy, *Notre Dame*; M.D., Duke (6/7/37); *Int., rotat. and Nose & Throat*, St. Vincents Hospital, New York City, 7/1/37—
- Ralph Kenneth Shields, *Pennsylvania State*; M.D., Duke (8/31/35); *Int. and Sr. Int. in Med.*, Henry Ford Hospital, Detroit, 9/1/35-8/31/38; *present address (in practice)*, Bethlehem, Pa.

* See footnote, p. 65.

- Burton Michael Shinnars, *Notre Dame*; M.D., Duke (9/5/36); *Int. in Med.*, Henry Ford Hospital, 9/1/36-8/31/37; *Int. in Ped.*, Duke Hospital, 9/18-12/31/37; *Int. in Neuro-Surg.*, Massachusetts General Hospital, Boston, 1/1-6/30/38; *Ass't. Res. in Med.*, Baltimore City Hospitals, 9/1/38-1/31/39; *Res. in Neurol.*, Massachusetts General Hospital, Boston, 2/1/39—
- Irving Michael Siegel, *Lehigh*; M.D., Duke (9/1/34); *Int.*, *rotating*, and *Admitting Phys.*, Kings County Hospital, Brooklyn, N. Y., 9/1/34-9/30/36; *present address (in practice)*, 607 West End Ave., New York City.
- George Addison Silver, III, *Guilford College*; M.D., Duke (9/4/37); *Int. in Ped.*, Duke Hospitals, 9/1/37-6/30/38; *Int.*, *rotat.*, St. Francis Hospital, Trenton, N. J., 7/1/38-6/30/39, and in *Obs.*, Margaret Hague Maternity Hospital, Jersey City, N. J., 7/1/39—
- Albert Randall Smith, *Wisconsin*; med. stud., *ibid.*, 1929-32; M.D., Duke (3/21/34); *Int. in Path. and in Surg.*, Duke Hospital, 3/22/34-6/30/35; *Int. and Res. in Orth. Surg.*, State University of Iowa, University Hospitals, 7/1/35-6/30/39; *Assoc. in Orth. Surg.*, State University of Iowa, Children's Hospital, 7/1/39—
- John Goodrich Smith, *North Carolina*; M.D., Duke (12/18/34); *Int.*, *rotating*, Goldsboro City Hospital, Goldsboro, N. C., 1/1-6/30/35, and University Hospital, Philadelphia, 7/1/35-6/30/37; *Int. in Med.*, Park View Hospital, and in *practice*, Rocky Mount, N. C., 7/1/37—
- William Thornton Spence, *Lafayette, Wisconsin, Pennsylvania State, Alabama*; M.D., Duke (3/21/36); *Int.*, N. C. State Sanatorium, Sanatorium, N. C., 4/1-6/1/36; *Int.*, *rotating*, Mercy Hospital, Pittsburgh, Pa., 7/1/36-6/30/37; *Ass't. Res. in Surg. and Path.*, Memorial Hospital, New York City, 7/1-12/15/37; *Ass't. Phys. and Surg.*, Western N. C. Sanatorium for the Treatment of Tuberculosis, Black Mountain, N. C., 12/16/37-2/28/39; *Res. in Surg.*, Bellevue Hospital, New York City, 3/1/39—
- William Charles Spring, Jr., *Wisconsin*; M.D., Duke (9/5/36); *Int. in Med.*, University Hospitals of Cleveland, 10/15/36-2/28/38; *Ass't. Res. in Med.*, Lakeside Hospital, Cleveland, 3/1-7/31/38; *Ass't. Res.*, Thorndike Memorial Laboratory, Boston, 8/15/38-8/31/39; *Fellow*, Rockefeller Institute for Med. Research, Princeton, N. J., 9/1/39—
- Glenn Emory Stayer, *Pittsburgh, Columbia*; M.D., Duke (12/18/34); *Int.*, *rotating*, Touro Infirmary, New Orleans, 12/19/34-6/30/35; *Int.*, *Ass't. Res. and Res. in Otolaryn.*, Duke Hospital, 7/1/35-6/30/38; *Ophthalmologist for State Blind Commission*, Raleigh, N. C., 7/1-9/30/38; *present address (in practice)*, First Nat'l. Bank Bldg., Tampa, Fla.
- Joseph Blackburn Stevens, *Davidson*; M.D., Duke (12/20/35); *Int. in Path. and Int. and Ass't. Res. in Med. and Ass't. Res. in Neurol.*, Duke Hospital, 1/1/36—
- Ralph Richards Stevenson, *Utah*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int. in Surg.*, Strong Memorial Hospital, Rochester, N. Y., 7/1/32-6/30/33; *Ass't. Res. in Path.*, Baltimore City Hospitals, 9/1/33-2/4/34; *Contract Surgeon*, Walter Reed Hospital, Washington, D. C., 1/29-8/22/34; *Res. in Path.*, Baltimore City Hospitals, 9/1/34-6/30/35; *Ass't. in Surg.*, Walter Reed Hospital, 7/1/35-6/30/36, *present address (in practice)*, 3131 Sixteenth St., N. W., Washington, D. C.
- Charles Paul Stevick, *Duke*; M.D., *ibid.* (9/5/36); *Int. in Ped.*, Johns Hopkins Hospital, 9/6-12/31/36, and Duke Hospital, 1/1-6/30/37; *Int. and Ass't. Res. in Ped.*, Children's Hospital, Cleveland, 7/1/37-6/30/39; *present address (in practice)*, Goldsboro, N. C.
- Robert Boyd Stith, Jr., *Duke*, M.D., *ibid.* (6/8/35); *Int. in Med.*, Duke Hospital, 7/1/35-6/30/36; and Cornell Medical Center, New York City, 7/1/36-6/30/37; *present address (in practice)*, Florence, S. C.

* See footnote, p. 65.

- Murdo Eugene Street, Jr., *Duke, North Carolina*; med. stud., latter, 1933-35; M.D., Duke (3/20/37); *Int.*, Moore County Hospital, Inc., Pinehurst, N. C., 3/25-6/20/37; *Int.*, Public Health Service, U. S. Marine Hospital, Norfolk, Va., 7/1/37-4/20/38; *Ass't. Surgeon*, U. S. Marine Hospital, Savannah, Ga., 7/1/38—
- Benjamin Anderson Strickland, Jr., *Mars Hill, Wake Forest*; M.D., Duke (12/19/33); *Int.*, Woman's Hospital, Baltimore, 12/20/33-8/31/34; *Ass't. Res.*, U. S. Marine Hospital, Baltimore, 9/1/34-6/30/35; *Ass't. Surg.*, Headquarters, Third Corps Area, Baltimore, 7/1/35-6/30/36; *1st. Lieut.*, and *Capt.*, Edgewood Arsenal, Md., 7/1/36-8/6/38, and *Capt.*, Med. Corps., U. S. Army, Washington, D. C., 8/7/38—
- Hugh Franklin Swingle, Jr., *Virginia, Tennessee, State Teachers*; M.D., Duke (11/30/35); *Int. in Med.*, Duke Hospital, 12/1/35-9/30/36; *Fellow in Surg.*, Mayo Clinic, Rochester, Minn., 10/1/36—
- Victor Leo Szanton, *Alabama*; M.D., Duke (6/13/36); *Int.*, rotating, Watts Hospital, Durham, N. C., 7/1/36-6/30/37; *Int. in Ped.*, Jewish Hospital, Brooklyn, N. Y., 7/1/37-6/30/38; *Ass't. Res. and Res. in Ped.*, Mt. Sinai Hospital, New York City, 7/1/38-6/30/39; *Camp Physician*, Camp Wigwam, Harrison, Me., 7/1-8/31/39; *present address (in practice)*, Deal's Island, Md.
- Abraham Jack Tannenbaum, *Ohio State, Duke*; M.D., latter (6/6/35); *Int.*, rotating, St. Leo's Hospital, Greensboro, N. C., 7/1/35-6/30/36, and Galinger Municipal Hospital, Washington, D. C., 7/1/36-6/30/37; *present address (in practice)*, 614 W. Market St., Greensboro, N. C.
- Waller Littlepage Taylor, Jr., *Duke*; M.D., *ibid.* (9/2/33); *Int.*, rotating, Hospital of St. Vincent de Paul, Norfolk, Va., 9/3/33-6/30/34; *Ass't. Res. in Med.*, Memorial Hospital, Norfolk, Va., 7/1/34-6/30/35; *present address (in practice)*, Virginia Beach, Va.
- Robert Hendon Thomason, *Sam Houston Teachers, Agricultural & Mechanical College of Texas, Duke*; M.D., *ibid.* (8/31/35); *Int. in Ped.*, Duke Hospital, 9/1/35-6/30/36; *Ass't. Res. in Med.*, Baltimore City Hospitals, 7/1/36-6/30/38; *present address (in practice)*, Huntsville, Texas.
- Arthur Fred Turner, Jr., *Southern, Duke*; M.D., *ibid.* (6/13/36); *Int.*, rotating, Christ Hospital, Cincinnati, O., 7/1/36-6/30/37; *Int. in Surg.*, Medical College of Virginia, Hospital Division, Richmond, 7/1/37-6/30/38; *Jr. Res. in Urol.*, Henry Ford Hospital, Detroit, 9/1/38—
- Thaddeus Gilbert Upchurch, *North Carolina*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int. and Ass't. Res.*, rotating, and *Res. in Obs. and Gyn.*, City of Atlanta Grady Hospital, Atlanta, Ga., 7/1/32-6/30/35; *present address (in practice)*, Smithfield, N. C.
- George Irvin Uhde, *Duke*; M.D., *ibid.* (6/13/36); *Int.*, rotating, and *Res. in Med.*, Reading City Hospital, Reading, Pa., 7/1/36-6/30/38; *Res.*, Baltimore Eye, Ear and Throat Hospital, 7/1/38—
- Condit Brewer Van Arsdall, Jr., *Kentucky Wesleyan, Kentucky*; M.D., Duke (6/7/37); *Int.*, General Hospital, Saranac Lake, N. Y., 6/21/37-6/30/38; *Int. and Ass't. Res. in Med.*, Duke Hospital, 11/1/38—
- Myron Cherrington Waddell, *Nebraska, Wesleyan, St. Louis*; med. stud., *ibid.*, 1929-31; M.D., Duke (12/19/33); *Int. in Path.*, Presbyterian Hospital, Denver, Colo., 1/1/34-8/31/35; *present address (in practice)*, 637 Republic Bldg., Denver, Colo.
- Needham Edgar Ward, Jr., *Wake Forest, Texas, North Carolina*; med. stud., *ibid.*, 1928-30; M.D., Duke (3/19/32); *Int.*, rotating, James Walker Hospital, Wilmington, N. C., 4/1-6/30/32, and McKeesport Hospital, McKeesport, Pa., 7/1-7/31/32; *Int. and Res.*, rotating, Watts Hospital, Durham, N. C., 8/1/32-6/30/34; *present address (in practice)*, Greenville, N. C.

* See footnote, p. 65.

- William Julian Weatherford, *Alabama*; med. stud., *ibid.*, 1929-31; M.D., Duke (3/22/3); *Int., rotating*, Watts Hospital, Durham, N. C., 7/1/33-6/30/34; and City Hospital, Mobile, Ala., 7/1/34-4/1/35; *present address (in practice)*, Pascagoula, Miss.
- Thomas Wilson Wesson, *Mississippi*; M.D., Duke (6/8/35); *Int. in Ped.*, Strong Memorial Hospital, 7/1/35-6/30/36, and *rotating*, Rochester General Hospital, Rochester, N. Y., 9/1/36-8/31/37; *Int. and Ass't. Res. in Otolaryn.*, Barnes Hospital, St. Louis, Mo., 9/1/37-6/30/39; *Res. in Otolaryn.*, Kansas City General Hospital, 7/1/39—
- James Griffith Whildin, *Duke*; M.D., *ibid.* (6/7/37); *Int., rotat.*, Reading City Hospital, Reading, Pa., 7/1/37-6/30/38; *Int. in Surg., and Fellow*, National Cancer Institute, Duke Hospital, 7/1/38—
- Millard Brown White, *Florida, Duke*; M.D., latter (6/8/35); *Int., rotating*, Western Pennsylvania Hospital, Pittsburgh, Pa., 7/1-12/31/37; *present address (in practice)*, Sarasota, Fla., and *Assoc. in Med.*, Halton Hospital, Sarasota, Fla.
- Walter Raphael Wiley, *Wake Forest*; med. stud., *ibid.*, 1928-30; M.D., Duke (6/11/32); *Int., rotating*, Watts Hospital, Durham, N. C., 7/1/32-6/30/33; *House Physician*, Goldsboro City Hospital, Goldsboro, N. C., 9/1-12/31/33; *Int. in Med. and Ass't. Phys.*, Wassaic State School, Wassaic, N. Y., 1/1/34-2/16/36; *present address (in practice)*, Chesterfield, S. C.
- William Edgar Wilkinson, *Davidson*; med. stud., North Carolina, 1928-30; M.D., Duke (6/11/32); *Int. in Surg., and Ass't. Res. in Path. and in Surg.*, Duke Hospital, 7/1/32-6/30/35; CCC, Army 4, Franklinton, N. C., 8/1/35-12/31/36; CCC, Fort Bragg, N. C., 1/1/37-6/30/37; *1st. Lieut. and Capt.*, Army Medical Center, Washington, D. C., and *Ass't. Chief. Infectious Disease Section*, Walter Reed Hospital, Washington, D. C., 9/1/37-5/31/39; *Ass't. Med. Serv.*, U. S. Army, Fort Leavenworth, Kansas, 6/11/39—
- Jarrett Earl Williams, *Emory & Henry*; M.D., Duke (9/2/33); *Int. and Ass't. Res. in Path.*, Duke Hospital, 7/1/33-6/30/35; *Adjunct Prof. in Path.*, Univ. of Texas, School of Medicine, Galveston, Texas, 9/1/35-8/31/36; *Assoc. Med. Director*, Tenn. Eastman Corp., Kingsport, Tenn., 4/1/36-8/15/37; *Assoc. Prof. of Path.*, Univ. of Texas, School of Medicine, Galveston, Texas, 9/1/37—
- Candler, Arthur Willis, *Duke*; M.D., *ibid.* (6/13/36); *Int., rotating*, Watts Hospital, Durham, N. C., 7/1/36-6/30/37; *Int.*, Hugh Chatham Memorial Hospital, Elkin, N. C., 7/1/37-6/30/38; *present address (in practice)*, Candler, N. C.
- James Stevenson Wilson, *Davidson*; M.D., Duke (3/20/37); *Int., rotat.*, Richmond Memorial Hospital, 3/20-6/30/37; *Int. in Surg.*, Henry Ford Hospital, Detroit, 7/1/37-6/30/38; *Ass't. Res. in Surg.*, Watts Hospital, Durham, N. C., 7/1/38-6/30/39; *Surgeon*, Kunsan Hospital, Kunsan, Korea, 8/1/39—
- James Raymond Wilson, *Alabama, Harvard*; M.D., Duke (6/9/34); *Int., rotating*, Albany Hospital, Albany, N. Y., 7/1/34-6/30/35, and St. Elizabeth's Hospital, Utica, N. Y., 7/1/35-6/30/36; *present address (in practice)*, Utica, N. Y.
- Wesley Wellington Wilson, *Florida, Duke*; M.D., latter (3/20/37); *Int. in Med.*, Strong Memorial Hospital, Rochester, N. Y., 4/1-6/30/37; *Int. in Med., Ass't. Res. and Res. in Derm. & Syphilol.*, University of Chicago Clinics, 7/1/37—
- Charles Terry Wood, *Furman, Michigan*; M.D., Duke (6/9/34); *Int. and Res., rotating*, Hospital of St. Vincent de Paul, Norfolk, Va., 7/1/34-1/11/36; *Res., rotating*, Taylor Hospital, Ridley Park, Pa., 1/13/36-6/30/37; *present address (in practice)*, Chester, Pa.

* See footnote, p. 65.

FORMER RESIDENT STAFF OF DUKE HOSPITAL

Medicine

- Adams, Raymond D., M.D., *Duke*, 1936; Ass't. Res., 1937-38. Harvard Medical School, Boston, Mass.
- Baker, J. Samuel, M.D., *Duke*, 1934; Int., 1934-35. 3875 Wilshire Blvd., Los Angeles, Calif.
- Bellows, Rowland T., M.D., *Cornell*, 1930; Int., 1930-31. Strong Memorial Hospital, Rochester, N. Y.
- Borland, James L., M.D., *Harvard*, 1932; Int., 1932-33. Temple Univ., Philadelphia, Pa.
- Braxton, Herman H., M.D., *Johns Hopkins*, 1932; Int., 1932-33. Chase City, Va.
- Calder, Royall M., M.D., *Johns Hopkins*, 1929; Ass't. Res. and Res., 1930-33. 414 Navarro St., San Antonio, Texas.
- Caldwell, Eliza, M.D., *Vanderbilt*, 1932; Int., July-Nov., 1937; Ass't. Res., 1937-38. Bellevue Hospital, New York City.
- Callaway, Jaspas L., M.D., *Duke*, 1933; Int. and Ass't. Res., 1933-35. Duke Hospital, Durham, N. C.
- Cekada, Emil B., M.D., *Johns Hopkins*, 1929; Ass't. Res., 1930-32. 602 Chapel Hill St., Durham, N. C.
- Cooper, A. Derwin, M.D., *George Washington*, 1931; Int., 1933-34. 111 Corcoran St., Durham, N. C.
- Craven, Erle B., Jr., M.D., *Johns Hopkins*, 1929; Int., Ass't. Res. and Res., 1931-34. Lexington, N. C.
- Denholm, John S., M.D., *Duke*, 1935; Int., 1935-36. Burlington, N. C.
- Dinin, Benjamin G., M.D., *Duke*, 1933; Int., 1933-34. Kingston Ave. Hospital, Brooklyn, N. Y.
- Doak, Alfred D., M.D., *Harvard*, 1933; Int. and Ass't. Res., 1933-35. Shelbyville, Ky.
- Freeman, Gustave, M.D., *Duke*, 1933; Int., 1933-34. Univ of Chicago Clinics, Chicago, Ill.
- Graves, Grant O., M.D., *Ohio State*, 1932; Int., 1932-33. Hamilton Hall, Ohio State Univ. College of Medicine, Columbus, O.
- Haas, William R., M.D., *Duke*, 1938; Int., June-Oct., 1938. New Haven Hospital, New Haven, Conn.
- Hall, Snowden C., Jr., M.D., *Harvard*, 1930; Ass't. Res., 1932-34. 105 S. Union St., Danville, Va.
- Hudnall, Harry J., M.D., *Virginia*, 1931; Int., 1931-32. Covington, Va.
- Jones, Julia M., M.D., *Duke*, 1935; Int., 1936-37; Ass't. Res., July, 1937-Jan., 1938. Bellevue Hospital, New York City.
- Joyner, Austin L., M.D., *Duke*, 1934; Int., 1935-36. Lederle Laboratories, New Orleans, La.
- Kaufman, Wm. H., M.D., *Duke*, 1937; Int. and Ass't. Res., 1937-39. Univ. of Virginia Hospital, Charlottesville, Va.
- Leach, Charles E., M.D., *Duke*, 1935; Ass't. Res., 1936-37. Massachusetts General Hospital, Boston, Mass.
- Lepore, Michael J., M.D., *Rochester*, 1934; Int. and Ass't. Res., 1934-37. 919 E. 225th St., New York City, N. Y.
- Lovejoy, John F., M.D., *Duke*, 1932; Int., 1932-33. 1022 Park St., Jacksonville, Fla.
- McMillan, Robert L., M.D., *Duke*, 1933; Ass't. Res. and Res., 1934-37. 402 N. Liberty St., Winston-Salem, N. C.
- Magill, Thomas P., M.D., *Johns Hopkins*, 1930; Int., 1931-31. Cornell Univ. Medical College, New York City.
- Magruder, R. Gregory, M.D., *Virginia*, 1933; Int., 1934-35. 308 Market St., Charlottesville, Va.
- Manning, Isaac H., Jr., M.D., *Harvard*, 1935; Ass't. Res. and Res., 1937-39. Durham, N. C.

- Mayer, Walter B., M.D., *Pennsylvania*, 1930; Ass't. Res., 1931-32. 412 N. Church St., Charlotte, N. C.
- Menefee, Elijah E., Jr., M.D., *Duke*, 1936; Int., 1936-37. Bellevue Hospital, New York City.
- Miller, Ben. N., M.D., *Duke*, 1935; Int. and Ass't. Res., 1935-37. 2209 Wheat St., Columbia, S. C.
- Munroe, Henry S., M.D., *Duke*, 1935; Int., 1935-36. Duke Univ. School of Medicine, Durham, N. C.
- Noojin, Roy O., Jr., M.D., *Chicago*, 1937; Int., 1937-38. Huntsville, Ala.
- Ould, Carlton L., M.D., *Duke*, 1937; Int., 1937-38. Duke Hospital, Durham, N. C.
- Payne, Sheldon A., M.D., *Yale*, 1931; Ass't. Res., 1933-34. Shelton Clinic, Los Angeles, Calif.
- Peele, Talmage L., M.D., *Duke*, 1934; Int. and Ass't. Res., 1934-36. Duke Univ. School of Medicine, Durham, N. C.
- Pepper, Dickinson S., M.D., *Pennsylvania*, 1932; Int., 1932-33. Univ. of Pennsylvania School of Medicine, Philadelphia, Pa.
- Persons, Elbert L., M.D., *Harvard*, 1927; Res., 1930-32. Duke Hospital, Durham, N. C.
- Poole, Everett B., M.D., *Vanderbilt*, 1931; Ass't. Res. and Res., 1932-35. 202 Brown St., Greenville, S. C.
- Postlethwait, Raymond W., M.D., *Duke*, 1937; Int. and Ass't. Res., 1937-39. Henry Ford Hospital, Detroit, Mich.
- Preu, Paul W., M.D., *Cornell*, 1930; Int., 1931-32. 333 Cedar St., New Haven, Conn.
- Query, Richard Z., M.D., *Duke*, 1934; Ass't. Res. and Res., 1935-38. Medical Arts Bldg., Charlotte, N. C.
- Reese, Frederick M., M.D., *Johns Hopkins*, 1931; Int., 1931-32. 3203 N. Charles St., Baltimore, Md.
- Reque, Paul G., M.D., *Duke*, 1933; Int. and Ass't. Res., 1933-35. 109 College St., New Haven, Conn.
- Robinson, Frank H., M.D., *Duke*, 1935; Int., 1935-36. Jamestown, N. Y.
- Rockwell, Fred V., M.D., *Rochester*, 1936; Int., 1936-37. Cornell Univ. Medical College, New York City.
- Rueggsegger, James M., M.D., *Western Reserve*, 1931; Int. and Ass't. Res., 1931-34; Res., 1935-36. Univ. of Cincinnati School of Medicine, Cincinnati, O.
- Schiro, Harold S., M.D., *Johns Hopkins*, 1933; Ass't. Res., 1935-36. Doctors Bldg., Cincinnati, O.
- Smith, O. Norris, M.D., *Pennsylvania*, 1933; Ass't. Res., 1937-38. 101 N. Elm St., Greensboro, N. C.
- Smith, R. Eloise, M.D., *Yale*, 1930; Int. and Ass't. Res., 1930-32. Clifton Springs, N. Y.
- Stevens, Joseph B., M.D., *Duke*, 1935; Int. and Ass't. Res., 1937-39. Duke Hospital, Durham, N. C.
- Stith, Robert B., M.D., *Duke*, 1935; Int., 1935-36. 101 Cheves St., Florence, S. C.
- Stone, Robert E., M.D., *Harvard*, 1934; Ass't. Res., 1936-37. Chapel Hill, N. C.
- Swingle, Hugh F., M.D., *Duke*, 1935; Int., 1935-36. Mayo Clinic, Rochester, Minn.
- Syverton, Jerome T., M.D., *Harvard*, 1931; Int., 1931-32; Res., Aug., 1932. Univ. of Rochester School of Medicine, Rochester, N. Y.
- Walker, Rowland H., M.D., *Pennsylvania*, 1934; Ass't. Res., 1936-37. Martinsville, Va.
- Williams, Robert, M.D., *Pennsylvania*, 1935; Int. and Ass't. Res., 1936-38. Garfield Memorial Hospital, Washington, D. C.

Neuropsychiatry

- Craig, Robert L., M.D., *Hopkins*, 1935; Res., 1938-39. Duke Hospital, Durham, N. C.
 Davis, Charles B., Jr., M.D., *Pennsylvania*, 1935; Ass't. Res., July-Oct., 1937. Wilmington, N. C.
 Feder, John G., M.D., *Ohio State*, 1934; Ass't. Res., 1936-37. Greenville, S. C.
 Young, David A., M.D., *Harvard*, 1931; Ass't. Res., 1935-36. McLean Hospital, Belmont, Mass.

Surgery

- Armstrong, William E., M.D., *Emory*, 1931; Int., 1931-32. 478 Peachtree St., N. E., Atlanta, Ga.
 Baker, Walter W., M.D., *Washington*, 1928; Ass't. Res., 1930-32. Jefferson Medical College Hospital, Philadelphia, Pa.
 Bellows, Rowland T., M.D., *Cornell*, 1925; Int., 1931-32. Strong Memorial Hospital, Rochester, N. Y.
 Blady, John V., M.D., *Duke*, 1932; Int., 1932-33. Temple Univ. Hospital, Philadelphia, Pa.
 Blocksom, Berget H., Jr., M.D., *Duke*, 1933; Int., 1933-34. 303 N. Main St., Rockford, Ill.
 Bramer, James D., M.D., *Rochester*, 1935; Int., 1937-38. Palmyra, N. Y.
 Buckner, Frank W., M.D., *Duke*, 1936; Int., 1936-37. New Haven Hospital, New Haven, Conn.
 Bugg, Everett I., Jr., M.D., *Johns Hopkins*, 1937; Int., 1937-38. Johns Hopkins Hospital, Baltimore, Md.
 Burns, Robert A., M.D., *Rochester*, 1936; Int., 1936-37. Univ. of California Hospital, San Francisco, Calif.
 Caffee, Henry H., M.D., *Harvard*, 1931; Int., 1935-36. Orlando, Fla.
 Cherry, James H., M.D., *Duke*, 1933; Int., 1934-35. Mayo Clinic, Rochester, Minn.
 Chunn, Charles F., M.D., *Duke*, 1935; Int., 1936-37. Henry Ford Hospital, Detroit, Mich.
 Daniel, Walter E., M.D., *Medical College of Virginia*, 1931; Ass't. Res., 1936-38. Charlotte, N. C.
 Dein, Harry L., M.D., *Duke*, 1937; Int., 1938-39. Welfare Hospital, New York City.
 Devine, John W., M.D., *Duke*, 1935; Int. and Ass't. Res., 1935-38. 610 Church St., Lynchburg, Va.
 Farmer, Wm. D., M.D., *Duke*, 1934; Int., Ass't. Res. and Res., 1937-39. Duke Hospital, Durham, N. C.
 Feyder, Sydney, M.D., *Rochester*, 1936; Int., 1937-38. New Haven Hospital, New Haven, Conn.
 Finkelstein, Harold, M.D., *Johns Hopkins*, 1928; Ass't. Res. and Res., 1931-34. Duke Hospital, Durham, N. C.
 Furgurson, Ernest W., Jr., M.D., *Syracuse*, 1936; Int., July-Sept. 21, 1937. Williamston, N. C.
 Gardner, Clarence E., M.D., *Johns Hopkins*, 1928; Res., 1930-32. Duke Hospital, Durham, N. C.
 Gray, Cyrus L., Jr., M.D., *Duke*, 1937; Int., July, 1937-March, 1938. N. C. State Sanatorium, Sanatorium, N. C.
 Greenfield, Jack, M.D., *Duke*, 1935; Int., 1935-36. Starling Loving Hospital, Columbus, O.
 Griesmer, Ruth G., M.D., *Michigan*, 1930; Int., 1930-31. Anson Memorial Hospital, Balrampur, United Provinces, India.
 Haltom, William L., M.D., *Duke*, 1932; Int., 1932-33. City Hospital, Martinsburg, W. Va.
 Harris, Leo C., M.D., *Tennessee*, 1934; Ass't. Res., 1938-39. John Gaston Hospital, Memphis, Tenn.
 Heinitsh, George, M.D., *Duke*, 1932; Int., 1932-33. Fayetteville, N. C.

- Hicks, James M., M.D., *Medical College of State of South Carolina*, 1931; Int., 1931-32. 236 Evans St., Florence, S. C.
- Huey, Thomas F., M.D., *Vanderbilt*, 1932; Int., 1932-33. 931 Noble St., Anniston, Ala.
- Hutchison, Jay L., M.D., *Duke*, 1933; Int., 1933-34. 1141 4th Ave., Huntington, W. Va.
- James, Arthur G., M.D., *Ohio State*, 1937; Int., 1938-39. Ohio State University Hospital, Columbus, O.
- Jenkins, Raymond T., M.D., *Duke*, 1935; Int., 1935-36. U. S. Army, Fort Bragg, N. C.
- Johansmann, Ralph J., M.D., *Cincinnati*, 1934; Int., 1934-35. Univ. of Cincinnati College of Medicine, Cincinnati, O.
- Jones, R. Randolph, Jr., M.D., *Johns Hopkins*, 1928; Ass't. Res. and Res., 1930-33. Duke Hospital, Durham, N. C.
- Joyner, George W., M.D., *Duke*, 1932; Int., Ass't. Res. and Res., 1932-38. Asheboro, N. C.
- Lennon, Hershel C., M.D., *Pennsylvania*, 1931; Int., 1931-32. Temple Univ. Hospital, Philadelphia, Pa.
- Lilly, George, M.D., *Tulane*, 1931; Int., 1931-32. 25 S. E. 2nd Ave., Miami, Fla.
- Metcalfe, William, M.D., *Johns Hopkins*, 1937; Int., 1937-38. New Haven, Conn.
- Miller, John S., Jr., M.D., *Johns Hopkins*, 1934; Int., 1934-35. Moses-Ludington Hospital, N. Y.
- Munroe, H. Stokes, Jr., M.D., *Duke*, 1935; Int. and Ass't. Res., 1936-38. Duke Univ. School of Medicine, Durham, N. C.
- Newbern, Walter R., M.D., *Duke*, 1937; Int., 1938-39. Elizabeth Buxton Memorial Hospital, Newport News, Va.
- Oates, Max O., M.D., *Johns Hopkins*, 1929; Ass't. Res. and Res., 1932-36. City Hospital, Martinsburg, W. Va.
- Owens, Francis L., M.D., *Duke*, 1934; Int., 1934-35. Pinehurst, N. C.
- Patton, Wm. B., M.D., *Hopkins*, 1935; Int., July-Dec., 1935. University Hospital, Baltimore, Md.
- Perkins, P. Kermit, M.D., *Rush*, 1932; Int., April-July, 1931. Newport, R. I.
- Present, Arthur J., M.D., *Yale*, 1932; Int., 1932-33. Scripps Memorial Hospital, La Jolla, Calif.
- Pudenz, Robert H., M.D., *Duke*, 1935; Int., Jan.-Sept., 1936. Royal Victoria Hospital, Montreal, Que., Canada.
- Ruark, Robert J., M.D., *Pennsylvania*, 1931; Int., 1931-32. 127 Hargett St., Raleigh, N. C.
- Sanger, W. Paul, M.D., *Vanderbilt*, 1931; Int., Ass't. Res. and Res., 1931-37. 121 W. 7th St., Charlotte, N. C.
- Scadron, Eugene N., M.D., *Duke*, 1934; Int., 1935-36. Boston Lying-in Hospital, Boston, Mass.
- Schiebel, Herman M., M.D., *Hopkins*, 1933; Int., Ass't. Res. and Res., 1933-39. Durham, N. C.
- Schnoor, Thomas G., M.D., *Duke*, 1938; Int., Feb.-June, 1939. Stanford Univ. Hospital, San Francisco, Calif.
- Smith, Albert R., M.D., *Duke*, 1934; Int., 1934-35. Univ. Hospital, Iowa City, Iowa.
- Street, Dana M., M.D., *Cornell*, 1936; Int., 1937-38. Johns Hopkins Hospital, Baltimore, Md.
- Wehs, Richard J., M.D., *Johns Hopkins*, 1932; Int., 1933-34. CCC Camp, Thornhurst, Pa.
- Whildin, James G., M.D., *Duke*, 1937; Int., 1938-39. Duke Univ. School of Medicine, Durham, N. C.
- Wilkinson, William E., M.D., *Duke*, 1932; Int. and Ass't. Res., 1932-35. Fort Leavenworth, Kan.
- Wilson, James E., M.D., *Johns Hopkins*, 1934; Int., 1934-35. Long Island Hospital, Brooklyn, N. Y.

- Windsor, Roger G., M.D., *Carnell*, 1938; Int., 1938-39. Church Home and Infirmary, Baltimore, Md.
 Ziv, Louis B., M.D., *Jahns Hopkins*, 1930; Int., Ass't. Res. and Res., 1930-34. 500 Washington St., Portsmouth, Va.

Otolaryngology

- Covell, Kermit W., M.D., *Indiana*, 1935; Int., 1937-38. Cleveland City Hospital, Cleveland, O.
 Farmer, Wm. D., M.D., *Duke*, 1934; Int., 1935-36. Duke Hospital, Durham, N. C.
 Hargett, Edgar R., M.D., *Cincinnati*, 1931; Int., July-Oct., 1936. 6 W. Main St., Springfield, O.
 Hasler, Walter T., M.D., *Duke*, 1933; Ass't. Res., 1934-35; Res., 1935-36. 2730 Colby Ave., Everett, Wash.
 Heinitsh, George, M.D., *Duke*, 1932; Int., 1934-35; Ass't. Res., 1934-36; Res., 1936-37. Fayetteville, N. C.
 Hicks, James M., M.D., *Medical College of State of South Carolina*, 1931; Ass't. Res., 1932-33; Res., 1933-34. 236 W. Evans St., Florence, S. C.
 Matthews, E. Eugene, Jr., M.D., *Georgia*, 1930; Ass't. Res., 1931-32. Augusta, Ga.
 Potter, William B., M.D., *Nebraska*, 1937; John Gaston Hospital, Memphis, Tenn.
 Stayer, Glenn E., M.D., *Duke*, 1934; Int., 1935-36; Ass't. Res., 1936-37; Res., 1937-38. First Nat'l. Bank Bldg., Tampa, Fla.

Orthopaedics

- Holscher, Edward C., M.D., *Harvard*, 1935; Int., Ass't. Res. and Res., 1936-39. Hospital for Ruptured and Crippled, New York City.
 Hutchison, Jay L., M.D., *Duke*, 1933; Ass't. Res., 1935-36. 1141 Fourth Ave., Huntington, W. Va.
 Jacobs, Julian E., M.D., *Nebraska*, 1935; Ass't. Res., 1936-37; Res., 1937-38. Charlotte, N. C.
 Oates, Max O., M.D., *Hopkins*, 1929; Res., 1932-33. City Hospital, Martinsburg, W. Va.
 Raney, R. Beverley, M.D., *Harvard*, 1930; Res., 1934-37. Durham, N. C.
 Street, Dana M., M.D., *Carnell*, 1936; Int., 1937-38. Johns Hopkins Hospital, Baltimore, Md.

Urology

- Culbertson, Leon R., M.D., *Virginia*, 1936; Int., 1938-39. Univ. of Virginia Hospital, Charlottesville, Va.
 Daniel, Walter E., M.D., *Medical College of Virginia*, 1931; Ass't. Res. and Res., 1936-38. Charlotte, N. C.
 Feyder, Sydney, M.D., *Rochester*, 1936; Int., 1937-38. New Haven Hospital, New Haven, Conn.
 Haltom, William L., M.D., *Duke*, 1932; Ass't. Res. and Res., 1933-36. City Hospital, Martinsburg, W. Va.
 Weyrauch, Henry M., Jr., M.D., *Jahns Hopkins*, 1929; Res., July-Dec., 1934. 384 Post St., University of California, San Francisco, Calif.

Obstetrics and Gynecology

- Avner, S. Leighton, M.D., *Long Island Medical College*, 1928; Ass't. Res. and Res., 1931-32. Buxton, N. C.
 Black, John R., Jr., M.D., *Duke*, 1938; Int., and in Ped., 1938-39. Sydenham Hospital, Baltimore, Md.
 Conti, Martin E., M.D., *Duke*, 1933; Int., March-Aug., 1933. U. S. Navy, Portsmouth, Va.
 Derieux, George H., Jr., M.D., *Virginia*, 1932; Int., 1933-34; Ass't. Res. and Res., 1934-37. Santa Barbara, Calif.

- Donnelly, Grant L., M.D., *Duke*, 1933; Int., July, 1933. Univ. of North Carolina School of Medicine, Chapel Hill, N. C.
- Donnelly, Joseph P., M.D., *Yale*, 1932; Int., 1932-33. 788 Kearney Ave., Kearney, N. Y.
- Finch, Adam T., Jr., M.D., *Virginia*, 1931; Ass't. Res., 1932-33. Chase City, Va.
- Fraser, Clarence K., M.D., *Tufts*, 1935; Int. and Ass't. Res., 1936-38. George Washington Univ. School of Medicine, Washington, D. C.
- Freeman, Clarence D., M.D., *Virginia*, 1932; Int., 1932-33; Ass't. Res. and Res., 1933-36. 505 Washington St., Portsmouth, Va.
- Hill, Frances F. (Mrs. Frances Hill Fox), M.D., *Pennsylvania*, 1935; Int., 1936-37. Boston, Mass.
- Jones, John Walter, M.D., *Washington*, 1933; Ass't. Res., 1937-38. Southern Clinic, Texarkana, Texas.
- Lapsley, A. Fraser, M.D., *Virginia*, 1933; Int., July-Sept., 1935. Badin, N. C.
- Mahl, George K., M.D., *Duke*, 1934; Int., July-Dec., 1935. Ironton, O.
- Mauzy, Charles H., M.D., *Virginia*, 1933; Int., 1934-35. Winston-Salem, N. C.
- Payne, Sheldon A., M.D., *Yale*, 1931; Int. and Ass't. Res., 1934-36. Shelton Clinic, Los Angeles, Calif.
- Pearse, Richard L., M.D., *Harvard*, 1931; Ass't. Res. and Res., 1935-38. 602 Chapel Hill St., Durham, N. C.
- Peter, Beverly K., M.D., *Virginia*, 1930; Int., 1931-32. Beckley, W. Va.
- Perdue, John R., M.D., *Virginia*, 1932; Int., 1933-34. 25 S. E. 2nd Ave., Miami, Fla.
- Powell, Norborne B., M.D., *Baylor*, 1938; Int., 1938-39. Charity Hospital, New Orleans, La.
- Seitz, Gifford D., M.D., *Oregon*, 1932; Int., Ass't. Res. and Res., 1934-39. La Grande, Ore.
- Thomas, Walter L., M.D., *Virginia*, 1931; Ass't. Res. and Res., 1932-35. Duke Hospital, Durham, N. C.

Pediatrics

- Anderson, Harriott I. G., M.D., *Toronto*, 1935; Int., 1936-37. Univ. of Tennessee Medical School, Memphis, Tenn.
- Arena, Jay M., M.D., *Duke*, 1932; Ass't. Res. and Res., 1933-35. Duke Hospital, Durham, N. C.
- Badanes, Maynard B., M.D., *Duke*, 1936; Int., 1936-37. Flushing, Long Island, N. Y.
- Beall, Lawrence L., M.D., *Medical College of Virginia*, 1931; Ass't. Res., 1932-33. Cleveland, Miss.
- Billington, Sherod M., M.D., *Vanderbilt*, 1935; Int., 1935-36. Seattle, Wash.
- Booth, Marguerite, M.D., *Yale*, 1935; Int., 1935-36. Univ. Hospitals, Minneapolis, Minn.
- Burns, Margaret V., M.D., *Duke*, 1937; Int., 1937-38. Brandywine Sanatorium, Marshallton, Del.
- Caldwell, Eliza, M.D., *Vanderbilt*, 1932; Int., 1936-37. Bellevue Hospital, New York City, N. Y.
- Cason, John F., M.D., *Vanderbilt*, 1932; Int., 1932-33. Murfreesboro, Tenn.
- Collier, James L., M.D., *Tulane*, 1933; Int., 1934-35. 1215 Walker Ave., Houston, Texas.
- Craven, Jean D., M.D., *Johns Hopkins*, 1930; Int., Ass't. Res. and Res., 1930-34. Lexington, N. C.
- Cross, Almon R., M.D., *Duke*, 1938; Int., and in Obs., 1938-39. New York Hospital, New York City.
- Dunlap, Ernest B., Jr., M.D., *Duke*, 1939; Int., July and Aug., 1939.
- Gault, William H., M.D., *Yale*, 1936; Int., 1937-38. Children's Hospital, Cincinnati, O.
- Gay, Charles H., M.D., *Duke*, 1933; Ass't. Res. and Res., 1934-36. Professional Bldg., Charlotte, N. C.

- Harris, Jerome S., M.D., *Harvard*, 1933; Ass't. Res., 1937-38. Duke Hospital, Durham, N. C.
- Harrison, Glenn E., M.D., *Iowa*, 1928; Res., July-Dec., 1931. Park Hospital Clinic, Mason City, Iowa.
- Hewell, Barbara A., M.D., *Vanderbilt*, 1932; Int., 1934-35. Hamilton County Tuberculosis Sanatorium, Cincinnati, O.
- Lawton, Anne L., M.D., *Yale*, 1930; Ass't. Res., 1931-33. 305 Blackstone Blvd., Providence, R. I.
- Li, Pei-Kuang, M.D., *Cheeloo*, 1930; Int., 1938-39.
- MacColl, Wm. A., M.D., *Duke*, 1938; Int. and Ass't. Res., 1938-39. Boston Dispensary, Boston, Mass.
- Martin, Jean M., M.D., *Virginia*, 1936; Int., 1937-38. State Teachers College, Farmville, Va.
- Mignone, Joseph, Jr., M.D., *Yale*, 1933; Int. and Ass't. Res., 1933-34. 388 Orange St., New Haven, Conn.
- Morton, Henry G., M.D., *Duke*, 1937; Int. and Ass't. Res., 1937-38. New York Postgraduate Hospital, New York City, N. Y.
- Pachman, Daniel J., M.D., *Duke*, 1934; Res., 1936-37. Univ. of Chicago Clinics, Chicago, Ill.
- Platt, Louis, M.D., *Iowa*, 1936; Ass't. Res., 1938-39. Children's Hospital, Buffalo, N. Y.
- Rasmussen, L. Paul, M.D., *Duke*, 1935; Res., 1937-38. Salt Lake City, Utah.
- Rollins, Charles D., M.D., *Pennsylvania*, 1935; Int., 1937-38. Henderson, N. C.
- Shepard, Karl, M.D., *Harvard*, 1935; Int., Jan.-July, 1939. Children's Hospital, Roaring Gap, N. C.
- Shinners, Burton M., M.D., *Duke*, 1936; Int., 1937-38. Massachusetts General Hospital, Boston, Mass.
- Silver, George A., M.D., *Duke*, 1937; Int., 1937-38. Margaret Hague Maternity Hospital, Jersey City, N. J.
- Spekter, Louis, M.D., *Rochester*, 1933; Int., 1933-34; Res., 1935-36. Asylum St., Hartford, Conn.
- Stevick, Charles P., M.D., *Duke*, 1936; Int., 1936-37. Goldsboro, N. C.
- Styron, Charles W., M.D., *Duke*, 1938; Int., 1938-39. Boston City Hospital, Boston, Mass.
- Thomason, Robert H., M.D., *Duke*, 1935; Int., 1935-36. Huntsville, Texas.
- Thompson, Sarah Vance (Mrs. Vance Thompson Alexander), M.D., *Vanderbilt*, 1931; Int., 1931-32. Fort Bliss, Texas.
- Weitz, Frank, M.D., *Tulane*, 1935; Int., 1936-37; Ass't. Res., July-Sept., 1937. 1430 Tulane Ave., New Orleans, La.
- Wren, James C., M.D., *Duke*, 1939; Int., April-July, 1939. Bellevue Hospital, New York City.

Roentgenology

- Apple, Elbert D., M.D., *Washington*, 1929; Res., 1930-32. Wesley-Long Hospital, Greensboro, N. C.
- Harrison, Edward K., M.D., *Columbia*, 1932; Ass't. Res. and Res., 1936-38. Brooklyn, N. Y.
- Lehman, Jacob S., M.D., *Hahnemann*, 1931; Ass't. Res. and Res., 1933-35. 250 S. 18th St., Philadelphia, Pa.
- Parrish, Madison E., M.D., *South Carolina*, 1932; Ass't. Res., 1934-36. 16 W. Calhoun St., Sumter, S. C.
- Reuter, Ernest G., M.D., *Oregon*, 1933; Ass't. Res., 1937-38. Massachusetts General Hospital, Boston, Mass.
- Thornton, Walter F., M.D., *Baylor*, 1927; Res., 1935-36. 725 Church St., Lynchburg, Va.
- Williams, Robert, M.D., *Pennsylvania*, 1935; Ass't. Res., 1938-39. Garfield Memorial Hospital, Washington, D. C.

Pathology

- Anderson, William A., M.D., *Toronto*, 1934; Ass't. Res., 1936-37. Univ. of Tennessee, Memphis, Tenn.
- Balas, Elizabeth M., M.D., *Duke*, 1938. Baltimore City Hospitals, Baltimore, Md.
- Brian, Earl W., M.D., *Duke*, 1934; Ass't. Res., 1935-36. Raleigh, N. C.
- Cooper, A. Derwin, M.D., *George Washington*, 1931; Int., 1932-33. 11 Corcoran St., Durham, N. C.
- Craven, Erle B., M.D., *Johns Hopkins*, 1929; Res., 1930-31. Lexington, N. C.
- Daniel, Walter E., M.D., *Medical College of Virginia*, 1931; Int., 1933-34. Charlotte, N. C.
- Devine, John W., M.D., *Duke*, 1935; Int., 1936-37. 610 Church St., Lynchburg, Va.
- Dill, Leslie Van D., M.D., *Duke*, 1936; Int., 1937-38. New York Hospital, New York City.
- Feyder, Sydney, M.D., *Rochester*, 1936; Int., 1936-37. New Haven Hospital, New Haven, Conn.
- Gill, A. James, M.D., *Duke*, 1938; Int., 1938-39. St. Paul's Hospital, Dallas, Texas.
- Hall, Snowden C., M.D., *Harvard*, 1930; Int., July-Aug., 1935. 105 Union St., Danville, Va.
- Lennon, Hershail C., M.D., *Pennsylvania*, 1931; Ass't. Res., 1932-33. Temple Univ. Hospital, Philadelphia, Pa.
- Oates, Max O., M.D., *Johns Hopkins*, 1929; Ass't. Res. and Res., 1930-32. City Hospital, Martinsburg, W. Va.
- Preston, John F., Jr., M.D., *Duke*, 1935; Int., 1936-37. Alexander Hospital, Kwangju, Korea.
- Rigdon, Raymond H., M.D., *Emory*, 1931; Int., Ass't. Res. and Res., 1931-34. Univ. of Tennessee, Knoxville, Tenn.
- Smoot, John L., M.D., *Hopkins*, 1937; Int., 1938-39. Univ. of Virginia Hospital, Charlottesville, Va.
- Street, Dana M., M.D., *Cornell*, 1936; Int., 1936-37. Johns Hopkins Hospital, Baltimore, Md.
- Wilbur, E. Lloyd, M.D., *Nebrosko*, 1934; Int. and Ass't. Res., 1936-38. Univ. of Arkansas College of Medicine, Little Rock, Ark.
- Wilkinson, Williap E., M.D., *Duke*, 1932; Ass't. Res., 1933-34. Fort Leavenworth Kan.
- Williams, Jarret E., M.D., *Duke*, 1933; Int. and Ass't. Res., 1933-35. Univ. of Texas School of Medicine, Galveston, Texas.
- Wood, Harold, M.D., *Tufts*, 1933; Ass't. Res., 1935-36. Tufts College Medical School, Boston, Mass.

Student Health

- Arnette, Eugene W., Jr., M.D., *Virginia*, 1937; Ass't. Res., 1938-39. Danville, Va.
- Frazer, William P., M.D., *Duke*, 1933; Int., 1933-34. Hamilton, Va.
- Kress, Jacob H., M.D., *Medical College of Virginia*, 1936; Ass't. Res., 1937-38. Thomasville, N. C.
- Saxe, Louis J., M.D., *Duke*, 1934; Int., 1934-35. 15 E. Monroe St., Phoenix, Ariz.
- Tannenbaum, Solomon, M.D., *Georgia*, 1935; Int., 1935-36. 753 Broad St., Augusta, Ga.

Private Diagnostic Clinic

- Bruyere, Paul T., M.D., *Chicago*, 1935; Fellow, 1935-36. Kent, Conn.
- Cekada, Emil B., M.D., *Johns Hopkins*, 1929; Fellow, 1932-33. 602 Chapel Hill St., Durham, N. C.
- Daniel, Walter E., M.D., *Medical College of Virginia*, 1931; Fellow, 1932-33. Charlotte, N. C.

- Doak, Alfred D., M.D., *Harvard*, 1933; Res., 1935-36. Shelbyville, Ky.
 Heinitsh, George, M.D., *Duke*, 1932; Fellow, 1933-34. Fayetteville, N. C.
 Lapsley, A. Fraser, M.D., *Virginia*, 1933; Fellow, 1934-35. Badin, N. C.
 Sartin, John M., M.D., *Tulane*, 1931; Fellow, 1931-32. U. S. Medical Center, Springfield, Mo.
 Walker, Rowland H., Jr., M.D., *Pennsylvania*, 1934; Res., 1935-36. Martinsville, Va.
 Withers, William A., M.D., *Rush*, 1936; Fellow, 1937-39. Raleigh, N. C.

Dentistry

- Lipton, Michael M., D.D.S., *Iowa*, 1936; Int., 1936-37. 1148 Ward Ave., Bronx, N. Y.
 Ross, Norman F., D.D.S., *Temple*, 1937; Int., 1937-38. Durham, N. C.

Biochemistry

- Harris, Jerome S., M.D., *Harvard*, 1933; Ass't. Res., 1936-37. Duke Hospital, Durham, N. C.
 Parfentjev, Ivan A., Ph.D., *Moscow*, 1916; Ass't. Res., 1932-34. Lederle Laboratories, Pearl River, N. Y.
 Payne, Sheldon A., M.D., *Yale*, 1931; Ass't. Res., 1932-33. Shelton Clinic, Los Angeles, Calif.
 Ricketts, Edwin T., M.D., *Duke*, 1936; Ass't. Res., Sept., 1938-Feb., 1939. Chiriqui Land Co. Hospital, Puerto Armuelles, Repub. of Panama.
 Schechter, Abraham J., M.D., *Yale*, 1931; Ass't. Res., 1935-36. 32 Lenox Road, Brooklyn, N. Y.

Administration

- Daniel, James M., A.B., *Duke*, 1936. Hospital Care Association, Durham, N. C.
 Hamilton, Horace Emerson, B.S., *North Carolina*, 1937. Hugh Chatham Memorial Hospital, Elkin, N. C.
 Hamlet, Christopher C., A.B., *North Carolina*, 1933. Home Security Life Insurance Co., Durham, N. C.
 King, Robert H., A.B., *Washburn*, 1933; M.A., *Duke*, 1935. Hospital Care Association, Raleigh, N. C.
 Thomas, R. Zachariah, A.B., *Duke*, 1936. Rex Hospital, Raleigh, N. C.
 Wiggins, John B., A.B., *North Carolina*, 1935. Hospital Care Association, Durham, N. C.

GEOGRAPHICAL DISTRIBUTION OF GRADUATES OF THE SCHOOL OF MEDICINE

<i>Alabama:</i>		<i>Georgia:</i>	
Birmingham	1	Atlanta	2
W. H. Darden, '32		J. M. Covington, Jr., '38	
Heflin	1	J. P. McCracken, '37	
N. C. Veale, '37		Alto	1
Mobile	1	R. F. Mikell, '33	
S. Rumpanos, '37		Coolidge	1
Tuscaloosa	1	A. R. Marsicano, '37	
A. S. Morrow, '36		Savannah	1
		M. E. Street, Jr., '37	
<i>Arizona:</i>		<i>Illinois:</i>	
Chloride	1	Chicago	6
G. C. Lewis, '33		J. M. Burk, '38	
Phoenix	1	J. H. Cox, '38	
L. J. Saxe, '34		G. Freeman, '33	
<i>California:</i>		W. V. Haymond, '38	
Livermore	1	D. J. Pachman, '34	
K. J. Costich, '35		W. W. Wilson, '37	
Los Angeles	2	Rockford	1
J. S. Baker, '34		B. H. Blocksom, Jr., '33	
J. W. Kerner, '36		<i>Iowa:</i>	
Pasadena	1	Iowa City	1
R. M. Mullen, '34		A. R. Smith, '34	
San Francisco	2	<i>Kansas:</i>	
J. W. Edwards, '36		Fort Leavenworth	1
T. G. Schnoor, '38		W. E. Wilkinson, '32	
Westwood	1	<i>Kentucky:</i>	
A. Gorfain, '34		Seco	1
<i>Colorado:</i>		O. F. Kleckner, '32	
Denver	2	<i>Louisiana:</i>	
H. E. Merkle, '38		New Orleans	4
M. C. Waddell, '33		A. L. Joyner, '34	
<i>Connecticut:</i>		W. J. McAnally, Jr., '38	
New Haven	5	W. F. Powell, '37	
F. W. Buckner, '36		W. Trachtenberg, '39	
W. R. Haas, '38		Shreveport	1
R. C. Morrow, '38		W. F. Drummond, '37	
P. G. Reque, '33		<i>Maine:</i>	
F. M. Woolsey, '38		Portland	1
<i>Delaware:</i>		J. R. Downing, '39	
Marshallton	1	<i>Maryland:</i>	
M. V. Burns, '37		Baltimore	23
<i>District of Columbia:</i>		A. J. Baer, '37	
Washington	8	E. M. Balas, '38	
C. W. Camalier, Jr., '38		R. M. Biddle, '39	
M. C. Cobey, '34		J. R. Black, '38	
R. T. Jenkins, '35		E. B. Dunlap, '39	
P. J. McNamara, '36		A. Y. Eagles, '39	
L. A. Pyle, Jr., '39		W. F. Eckbert, '39	
R. R. Stevenson, '32		A. L. Field, '39	
B. A. Strickland, Jr., '33		T. A. Gonder, Jr., '37	
P. H. Varner, '38		R. A. Hare, '34	
<i>Florida:</i>		C. W. Latchem, '38	
Jacksonville	3	P. W. Lucas, '39	
R. N. Joyner, '33		J. R. Martin, '37	
J. F. Lovejoy, '32		O. P. Moffitt, Jr., '38	
L. B. Provinsky, '36		F. R. Moore, '37	
Lakeland	1	P. I. Nixon, Jr., '39	
R. H. Ralston, '34		W. T. Ross, '38	
Miami	1	W. J. Rysanek, Jr., '39	
R. A. Wilson, '39		R. C. Smith, '39	
Sarasota	1	D. L. Surles, '39	
M. B. White, '35		L. Turner, '39	
Tampa	1	G. I. Uhde, '36	
G. E. Stayer, '34		D. B. Wyvell, '38	
		Deal's Island	1
		V. L. Szanton, '36	

Massachusetts:

Boston	12
R. D. Adams, '36	
J. H. Currens, '38	
R. J. Duffy, '33	
H. J. Fox, '35	
C. D. Genge, '34	
T. D. Kinney, '36	
C. E. Leach, '35	
J. M. Lesko, '37	
W. A. MacColl, '38	
E. N. Scadron, '34	
B. M. Shinnors, '36	
C. W. Styron, '38	
Worcester	1
H. P. Harris, Jr., '36	
Wrentham	1
L. E. Lee, Jr., '37	

Michigan:

Detroit	9
C. F. Chunn, '35	
A. D. Finch, '35	
D. F. Marion, '35	
H. T. E. Munson, '39	
A. H. Pate, '37	
R. W. Postlethwait, '37	
W. E. Sharpe, Jr., '34	
J. R. Timmons, '39	
A. F. Turner, Jr., '36	
Saginaw	1
J. L. Ackerman, '33	

Minnesota:

Lindstrom	1
A. Neumaier, '35	
Minneapolis	1
A. R. E. Buirge, '34	
Rochester	3
J. H. Cherry, '33	
J. M. Ivie, '38	
H. F. Swingle, Jr., '35	

Mississippi:

Pascagoula	1
W. J. Weatherford, '33	

Missouri:

Kansas City	1
T. W. Wesson, '35	
Springfield	1
J. W. Sachs, '38	

Montana:

Great Falls	1
F. H. Crago, '35	

New Jersey:

Basking Ridge	1
J. S. Forbes, Jr., '34	
Frenchtown	1
A. M. Jenkins, '35	
Jersey City	2
R. H. Nickau, '39	
G. A. Silver, '37	
New Brunswick	1
N. O. Bowman, '32	
Newark	2
H. M. Holtz, '35	
W. A. Leff, '36	
Pompton Plains	1
B. B. Burrill, Jr., '36	
Princeton	1
W. C. Spring, Jr., '36	
Union City	1
S. J. Margolin, '34	
White Plains	1
C. A. Collins, '35	

New York:

Albany	1
R. C. Webb, '39	
Brooklyn	5
B. G. Dinin, '33	
N. Hornick, '37	
N. Ruby, '33	
I. B. Wexler, '39	
C. S. Whitaker, '38	
Jamestown	1
F. H. Robinson, Jr., '35	
Long Island	2
M. B. Badanes, '36	
C. Cramer, '35	
Mount Morris	1
G. M. Bogardus, '38	
New York City	19
F. W. Alter, Jr., '37	
B. Bissell, '36	
J. W. Brandt, '38	
A. F. Cross, '38	
L. V. Dill, '36	
D. C. Gill, '38	
R. H. Godwin, '34	
J. M. Jones, '35	
E. E. Menefee, Jr., '36	
H. G. Morton, '37	
R. E. Nitschke, '37	
H. L. Reed, '36	
J. E. Sheehy, '37	
I. M. Siegel, '34	
W. T. Spence, '36	
S. Stark, '39	
J. M. Vanhoy, '38	
J. A. C. Wadsworth, '39	
J. C. Wren, '39	
Rochester	1
J. M. Douglas, '39	
Staten Island	1
A. C. Gose, '37	
Utica	1
J. R. Wilson, '34	
Wassaic	1
R. J. Depner, '32	
Welfare Island	3
H. L. Dein, '37	
W. H. Glass, '37	
J. Lawrence, '39	
North Carolina:	
Asheboro	1
G. W. Joyner, '32	
Black Mountain	1
J. C. Burge, Jr., '37	
Burlington	1
J. S. Denholm, '36	
Burnsville	1
R. O. Jones, '35	
Candler	1
C. A. Willis, '36	
Chapel Hill	1
G. L. Donnelly, '33	
Charlotte	3
C. H. Gay, '33	
P. Naumoff, '37	
R. Z. Query, Jr., '34	
Concord	1
M. B. Cree, '34	
Cooleemee	1
W. P. Kavanagh, '35	
Durham	58
T. F. Adkins, '36	
R. L. Alter, '37	
L. A. Andrews, '32	
J. M. Arena, '32	
G. J. Axelson, '37	
L. D. Baker, '33	
S. W. Barefoot, '38	

Texas:

Dallas	1
A. J. Gill, '38	
Galveston	1
J. E. Williams, '33	
Houston	1
C. F. Montgomery, '33	
Huntsville	1
R. H. Thomason, '35	

Utah:

Salt Lake City	1
L. P. Rasmussen, '35	

Virginia:

Bedford	1
D. H. Robinson, '35	
Charlottesville	1
W. H. Kaufman, '37	
Hamilton	1
W. P. Frazer, '33	
Lynchburg	1
J. W. Devine, '35	
Newport News	1
W. R. Newbern, '37	
Norfolk	2
M. S. Herrington, '37	
B. R. Kennon, '34	
Portsmouth	1
M. E. Conti, '33	
Rural Retreat	1
O. D. Boyce, '33	
Virginia Beach	1
W. L. Taylor, Jr., '33	

Washington:

Everett	1
W. T. Hasler, '33	

West Virginia:

Beckley	1
E. N. DuPuy, '32	
Charleston	2
J. Boiarsky, '35	
T. R. Mattocks, '38	
Elverton	1
E. M. Braun, '36	
Huntington	1
J. L. Hutchison, '33	
Martinsburg	1
W. L. Haltom, '32	
Williamson	1
J. Gaskel, '33	

Canada:

Montreal	1
R. H. Pudenz, '35	
Victoria (British Columbia)	1
F. M. Adams, Jr., '39	

Panama:

Puerto Armuelles	1
E. T. Ricketts, '36	

Korea:

Kunsan	1
J. S. Wilson, '37	
Kwanju	1
J. F. Preston, Jr., '35	

South America:

Columbia	1
G. H. Cortes, '35	

INDEX

Ackerman, G. L.	70, 97	Bassett, V. H.	24
Adams, C. N.	70, 98	Batchelor, R. P.	24
Adams, E. W.	57	Bateman, O. J., Jr.	58
Adams, F. M., Jr.	65, 99	Bauer, J. T.	24
Adams, R. D.	70, 87, 97	Baum, R. E.	58
Adkins, T. F.	6, 21, 45, 70, 97	Baylin, G. J.	7, 21, 35, 45, 71, 98
Administrative Committee	19	Beall, K. H.	24
Administrative Council	23	Beall, L. L.	92
Admission, application for	33	Beard, D. W.	7, 41
committee on	23	Beard, J. W.	7, 20, 41
requirements for	33	Beaumont Committee	23
Administration, Duke Hospital	19, 29	Bednarz, S. I.	58
Administration, officers of	5	Bellows, R. T.	87, 89
Administration staff	19	Benbow, E. P., Jr.	58
Admitting office	25	Benson, C. L.	52
Advanced standing requirements	33	Bernheim, F.	7, 37
Aker, H. T.	52	Bernheim, M. L. C.	7, 36
Alter, F. W., Jr.	70, 97	Berry, C. D.	26, 65, 98
Alter, R. L.	22, 71, 97	Beyer, E. C.	58
Altwater, F. V.	6, 19, 23, 29	Biddle, R. M.	65, 96
Alyea, E. P.	6, 19, 23, 41	Bieber, G. F.	52
Ames, R. H.	57	Bigger, I. A.	24
Anatomy	35, 48	Billington, S. M.	92
Anderson, H. I. G.	92	Biochemistry	36, 48
Anderson, N. L.	57	Biology, requirement in	33
Anderson, W. A.	94	Bissell, B.	71, 97
Anderson, W. B.	6, 19, 41	Black, Boyd	54
Andrews, L. A., Jr.	71, 97	Black, J. R., Jr.	65, 91, 96
Andrus, F. H.	57	Blady, J. V.	71, 89, 98
Anesthesia	29	Blocksom, B. H., Jr.	71, 89, 96
Angier B. Duke Memorial and other Loan Funds	50	Board, expenses	50
Apple, E. D.	93	Bogardus, G. McC.	65, 97
Application for Admission	33	Bogart, W. M., Jr.	21
for internships	31	Boiarsky, J.	71, 99
postgraduate study	30	Bonser, W. H.	58
School of Dietetics	28	Books	32, 50
School of Medicine	33	Booth, M.	92
School of Nursing	28	Borland, J. L.	87
Aptitude Tests	34	Boucher, G. O.	52
Arena, J. M.	6, 20, 45, 71, 92, 97	Bowman, N. O.	72, 97
Armstrong, W. E.	89	Boyce, O. D.	72, 99
Arnette, E. W., Jr.	94	Bradford, W. Z.	7, 45
Arnold, R. A.	6, 21, 42	Bradway, J. B.	46
Associate Staff	19	Bramer, J. D.	89
Athletic Fee	50	Brandt, J. W.	66, 97
Atwood, T. W.	6, 19, 41	Branning, W. S.	22
Avner, S. L.	91	Braun, E. M.	72, 99
Autumn quarter	48, 49	Braxton, H. H.	87
Axelson, G. J.	6, 21, 45, 71, 97	Bremer, A. H., Jr.	55
Babcock, K. O.	57	Brian, E. W.	72, 94, 98
Bachelor of Science (medicine)	34	Bridgers, W. H.	7, 21, 41, 72, 98
(nursing)	28	Brindley, C. O.	55
Bacteriology	38, 48	Brooks, E. B.	72, 98
Badanes, M. B.	71, 92, 97	Brown, E. T.	22
Badgley, W. O.	57	Brown, E. W.	58
Baeder, F. N.	57	Brown, F. C.	5
Baer, G. J.	71, 96	Brown, H. W.	7, 38, 46
Baity, H. G.	6, 46	Brown, I. W., Jr.	58
Baker, B.	28	Brown, J. W., Jr.	58
Baker, J. S.	71, 87, 96	Brown, K. B.	58
Baker, L. D.	6, 20, 41, 71, 97	Brown, R.	58
Baker, R. D.	6, 20, 37	Brown, W. E.	66, 98
Baker, R. P.	52	Brownell, I. O.	55
Baker, W. W.	89	Brumbach, W. K.	58
Balas, E. M.	65, 94, 96	Bruyere, P. T.	94
Baldwin, W. E., Jr.	54	Bryan, W. R.	7, 41
Bard, D. G., Jr.	52	Bryant, W. E.	55
Barfoot, S. W.	6, 39, 97	Bryson, T. D.	46
Barnes, G. B.	58	Buchwald, M. E.	55
Barrett, J. L.	52	Buckner, F. W.	72, 89, 96
Bartlett, S. R., Jr.	52	Bugg, E. I., Jr.	89
		Buirge, A. R. E.	72, 97
		Bunch, C. P.	66, 98

Burch, G. W.	55	(first year)	48
Burge, J. C., Jr.	66, 97	(second year)	48
Burgess, W. W.	58	(third year)	49
Burleson, N. M.	52	Cutchin, J. H., Jr.	55
Burk, J. M.	66, 96	Cuyler, W. K.	8, 45
Burnham, H. C.	28		
Burns, M. V.	66, 92, 96	Dabney, M. Y.	24
Burns, R. A.	89	Dalton, B. B.	73, 98
Burrill, B. B., Jr.	72, 97	Daniel, J. M.	95
Burwell, J. C., Jr.	72, 98	Daniel, R. D.	55
Butler, C. C.	55	Daniel, W. E.	89, 91, 94
		Dann, W. J.	8, 37
Caffee, H. H.	89	Darden, W. H.	73, 96
Calder, R. M.	87	David, J. K., Jr.	58
Caldwell, E.	87, 92	Davidson, L. T.	24
Calendar	3, 4	Davis, C. B.	89
Callaway, J. L.	7, 19, 39, 72, 87, 98	Davison, W. C.	5, 8, 19, 23, 45
Camalier, C. W., Jr.	66, 96	Dawson, A. N.	52
Campbell, F.	28	Dees, J. E.	8, 20, 41
Campbell, J. S.	52	Dees, S. C.	8, 20, 46
Campbell, R. L.	58	Degrees, B.S. (medicine)	34
Campbell, R. M.	52	B.S. (nursing)	28
Carlton, L. M., Jr.	52	M.D.	34
Carmichael, G. G.	66, 98	Dein, H. L.	73, 89, 97
Carroll, R. C.	22	Denholm, J. S.	74, 87, 97
Carter, B.	7, 19, 23, 45	Dentistry	44
Carter, R. R.	8, 21, 39, 66, 98	Departments of instruction	35
Cason, J. F.	92	Depner, R. J.	74, 97
Cayer, D.	21, 66, 98	Derieux, G. H., Jr.	91
Cekada, E. B.	87, 94	Dermatology	40
Certificate of graduate dietitian	28	Devine, J. W., Jr.	74, 89, 94, 99
Changes necessary for three		Diagnosis, physical	40, 49
quarter schedule	48	Diagnostic Clinic	27
Chemistry, requirements in	33	Dick, M.	9, 19, 37, 39
Cherry, J. H.	72, 89, 97	Dietetics, School of	28
Chiefs of Services	19	Dill, L. V. D.	74, 94, 97
Chunn, C. F.	73, 89, 97	Dinin, B. G.	74, 87, 97
Clark, E. H.	19	Dinsmore, W. A.	55
Clark, G. A.	24	Diploma of graduate nurse	28
Clark, J. R., Jr.	55	Diploma fees	50
Clark, S. L.	24	Dispensary committee	23
Clay, C. S.	58	Doan, C. A.	24
Clinical examination	49	Doak, A. D.	87, 95
Clinical microscopy	39, 49	Doctor of Medicine	34
Clinics	26, 27	Donaldson, J. H., Jr.	58
private diagnostic	27	Donnelly, G. L.	72, 92, 97
Cobb, C. H.	29	Donnelly, J. P.	92
Cobey, M. C.	73, 96	Douglas, J. M.	66, 97
Collier, J. L.	92	Downing, J. R.	66, 96
Collins, C. A.	73, 97	Drummond, W. F.	74, 96
Collins, C. C., Jr.	58	Duff, M. C.	28
Commencement fees	50	Duffy, R. J.	74, 97
Committees	19, 23	Duke, Angier B. Memorial	50
Conant, N. F.	8, 19, 38	Duke Hospital administration	19
Conforti, V.	58	Duke, J. B.	33
Conti, M. E.	73, 91, 99	Duke University Medical Society	32
Coolidge, T. B.	8, 36	Duncan, C. R.	22, 74, 98
Cooper, A. D.	87, 94	Dunlap, E. B., Jr.	22, 66, 92, 96
Cooper, G. J., Jr.	52	DuPuy, E. N.	74, 99
Cortes, G. H.	73, 99		
Costich, K. J.	73, 96	Eadie, G. S.	9, 23, 37
Covell, K. W.	91	Eagle, W. W.	9, 19, 41
Covington, J. M., Jr.	66, 96	Eagles, A. Y.	66, 96
Cox, J. H.	66, 96	Earngey, W. P., Jr.	22
Crago, F. H.	73, 97	Easley, E. B.	9, 21, 45, 74, 98
Craig, J. S.	8, 35	Eckbert, W. F.	66, 96
Craig, R. L.	8, 39	Edwards, H. P.	55
Cramer, C.	73, 97	Edwards, J. W.	74, 96
Craven, E. B., Jr.	8, 19, 39, 87, 94	Egan, J. R.	55
Craven, J. D.	92	Electives	35, 36, 37, 38, 41, 42, 45, 46, 47
Creadick, R. N.	22	Elgart, S.	9, 21, 36
Cree, M. B.	73, 97	Elliott, F. D.	59
Crispell, R. S.	8, 19, 23, 39	English, requirement in	34
Crosby, F. H.	66, 98	Entrance, requirements for	33
Cross, A. R.	66, 92, 97	Epperson, J. H.	9, 46
Culbertson, L. R.	91	Erickson, C. C.	9, 20, 37
Currens, J. H.	66, 97	Etter, H. S.	59
Curriculum, committee on	23	Everett, J. W.	9, 35
School of Medicine	47		

- Examinations 49
 committee on 23
 Executive Committee
 School of Medicine 23
 Expenses, School of Medicine 50
 Exum, W. A. 59
- Facilities of the Hospital 25
 Faculty 6
 Farmer, W. D. 9, 20, 41, 74, 89, 91, 98
 Farrar, J. 19, 32
 Farrar, M. P. 32
 Fearing, J. M. 55
 Fees, athletic 50
 commencement and diploma 50
 health 32, 50
 hospital 25
 National Board of Medical
 Examiners 50
 Public Dispensary 29
 School of Medicine 50
 School of Nursing 28
 Feder, J. G. 89
 Fellowship, research 51
 Ferguson, G. B. 9, 19, 41
 Ferro, M. 30
 Few, W. P. 5, 23
 Feyder, S. 89, 91, 94
 Field, A. L. 66, 96
 Final Clinical examinations 49
 Finch, A. D. 75, 97
 Finch, A. T. 92
 Finkelstein, H. 9, 20, 35, 41, 89
 Finner, R. W. 59
 First-year curriculum 48
 First-year students 52
 Fischbach, M. W. 75, 98
 Fisher, W. H., Jr. 59
 Fitzgerald, J. D. 75, 98
 Fletcher, R. V. 9, 20, 41
 Flower, A. H., Jr. 55
 Flowers, R. L. 5, 23
 Fogel, D. H. 22, 66, 98
 Forbes, J. S., Jr. 75, 97
 Forbes, R. D. 24
 Forbus, W. D. 9, 19, 23, 37, 46
 Ford, J. A., Jr. 55
 Ford, J. B., Jr. 59
 Foreword 2
 Former resident staff
 87, 88, 89, 90, 91, 92, 93, 94, 95
 Fortescue, W. N. 75, 98
 Forth, P. T. 59
 Fourth quarter schedule 48, 49
 Fox, H. J. 75, 97
 Fraser, C. K. 92
 Frazer, W. P. 75, 94, 99
 Free time 48, 49
 Freeman, C. D. 92
 Freeman, G. 75, 87, 96
 Fritz, M. 10, 20, 41
 Fugate, R. C. 10, 21, 42, 75, 98
 Fulmer, W. H. 59
 Fulp, J. F. 75, 98
 Fulton, M. N. 24
 Funds, loan 50
 Furgurson, E. W., Jr. 89
- Gale, E. T. 55
 Gardiner, A. H. 28
 Gardner, C. E., Jr. 10, 20, 23, 41, 89
 Gardner, G. H. 24
 Gaskel, J. 75, 99
 Gault, W. H. 92
 Gay, C. H. 75, 92, 97
 General statement 25
 General Surgery 42
 Genge, C. D. 75, 97
 Gengenbach, F. P. 24
- Geographical Distribution of Graduates
 of the School of Medicine 96, 97, 98, 99
 German, requirements 34
 Germer, H. R. 76, 98
 Gibbes, J. H. 24
 Gibbons, J. J., Jr. 59
 Gibson, P. 10, 19, 30
 Gilbert, G. G. 22
 Gill, A. J. 67, 94, 99
 Gill, D. C. 67, 97
 Gilliam, J. S., Jr. 59
 Ginn, S. A. 59
 Glass, W. H. 76, 97
 Goddard, D. W. 59
 Godwin, R. H. 76, 97
 Gonder, T. A., Jr. 76, 96
 Goodman, E. D. 10, 29
 Goodman, E. G. 59
 Gorfain, A. 76, 96
 Gose, A. C. 76, 97
 Gotaas, H. B. 10, 46
 Government, Student 32
 Graduates obtaining the required two
 years of hospital or laboratory training 65
 Graduates who have completed satisfac-
 torily two or more years of hospital
 or laboratory training 70
 Graham, R. H., Jr. 22
 Graham, W. A. 10, 20
 Grent, H. B. 59
 Graves, G. O. 87
 Graves, R. W. 10, 20, 39, 76, 98
 Gray, C. L., Jr. 75, 89, 98
 Greenfield, J. 75, 98
 Gregory, L. J. 52
 Griesmer, R. G. 89
 Griffith, E. R. 52
 Grimmett, M. H. 52
 Guerin, B. B. 59
 Gunter, J. U. 10, 20, 37
 Gynecology 44, 49
- Haas, W. R. 67, 87, 96
 Hackett, W. G. 52
 Haines, C. E., Jr. 22, 76, 98
 Haines, R. F. 59
 Hall, C. F. 22, 67, 98
 Hall, S. C., Jr. 10, 19, 39, 87, 94
 Haltom, W. L. 76, 89, 91, 99
 Hamblen, E. C. 10, 20, 23, 45
 Hamilton, H. E. 95
 Hamlet, C. C. 95
 Hamm, A. S. 10, 29
 Handler, Philip 10, 37
 Hanes, F. M. 11, 19, 23, 39
 Hansen-Prüss, O. C. E. 11, 29, 39
 Hare, R. A. 76, 96
 Hargett, E. R. 91
 Harned, J. 19, 30
 Harrell, G. T., Jr. 11, 21, 39, 76, 98
 Harris, H. P., Jr. 77, 97
 Harris, J. F. 55
 Harris, J. S. 11, 20, 36, 46, 93, 95
 Harris, L. C., Jr. 89
 Harris, W. W. 59
 Harrison, E. K. 93
 Harrison, Glenn E. 93
 Harshman, L. D. 59
 Hart, D. 11, 19, 23, 41
 Harvey, H. E. 52
 Harvey, H. I. 11, 21, 39, 77, 98
 Harvey, W. P. 52
 Hasler, W. T., Jr. 77, 91, 99
 Hass, G. C. 28
 Hastings, W. D., Jr. 21, 67, 98
 Hawkins, W. C. 59
 Haymond, W. V. 67, 96
 Haywood, H. B., Jr. 59
 Hege, J. R., Jr. 55

Heintsh, G.	77, 89, 91, 95, 98	Joyner, R. N.	78, 96
Henderson, A. F.	22, 77, 98	Junior medicine	40, 49
Hendrix, J. P.	11, 19, 39	Surgery	42, 49
Herlinger, R. D.	24	Junior, senior students	57
Hereford, J.	28		
Herring, E. J.	53	Karansky, S.	60
Herrington, M. S.	77, 99	Karmany, W. H.	60
Hetherington, D. C.	11, 35	Kash, K. M.	53
Hewell, B. A.	93	Kaufman, W. H.	78, 87, 99
Hiatt, J. S., Jr.	59	Kavanagh, W. P.	78, 97
Hickman, H. S.	67, 98	Keese, A. V.	53
Hicks, J. M.	90, 91	Keller, C.	30
Hill, F. F.	92	Kelley, J. W.	60
Hirst, D. V.	59	Kemp, M. D.	12, 20, 39
Histology	48	Kempner, W.	12, 19, 39
Hitch, J. M.	11, 20, 39	Kendrick, C. M.	78, 98
Hobgood, R. N.	19	Kennon, B. R., III	78, 99
Hock, C. W.	60	Kerhulas, A. A.	53
Hodges, J. W.	60	Kerman, H. D.	55
Holsher, E. C.	91	Kerner, J. W.	78, 96
Hollinshead, W. H.	11, 35	Kernodle, C. E., Jr.	55
Hollister, W. F.	11, 21, 41, 65, 98	Kernodle, H. B.	22, 67, 98
Holman, E. F.	24	Kiesau, K. R.	21
Holtz, H. M.	77, 97	Kilgore, S. R.	53
Hooker, D.	24	Kincaid, J. F., Jr.	55
Hooten, W. S.	53	King, H. A.	53
Horack, H. M.	77, 98	King, J. T., Jr.	24
Horne, S. F.	55	King, R. H.	95
Hornick, N.	77, 97	Kinney, T. D.	78, 97
Horsley, W. N.	60	Kintzing, W. B.	60
Hospital		Kiser, G. A.	60
Administration	29	Kleckner, O. F.	78, 96
Facilities	25	Klein, J. R.	12, 29, 36
policy	25	Klenner, F. R.	79, 98
Teaching staff	19	Kline, B. S.	24
Hospital rates	25	Kneipp, J. A.	53
Hough, J. D.	11, 21, 39	Knight, R. A.	22
Howard, H. L.	53	Kohn, H. I.	12, 37
Howard, J.	53	Koop, C. S.	55
Howe, A.	28	Kornegay, L. W., Jr.	53
Howell, C. W.	53	Kornegay, R. D.	67, 98
Hudnall, H. J.	87	Kostant, G. H.	60
Huey, T. F.	90	Kress, J. H.	94
Hurt, F. K.	12, 21, 44	Kuhie, L. S.	24
Hutchison, J. L.	77, 90, 91, 99	Kuhn, H. H.	60
Institutions at which the medical students were prepared	64	Laboratory technique school for	29
Instruction, departments of	35	Lambeth, S. S.	21
Instruction, schedule of	48, 49	Language, requirements in	34
Internships	29, 30, 31	Lapsley, A. F.	92, 95
committee on	23	Larsen, C. J.	67, 98
postgraduate	30	Latchum, C. W.	67, 96
Interne staff	21, 31	Laundry	50
Irving, R. C.	60	Lawrence, J.	67, 97
Ivie, J. McK.	67, 97	Lawton, A. L.	93
Jacobs, J. E.	91	Leach, C. E.	79, 87, 97
James, A. G.	90	Ledesma-Diaz, F. R.	55
Jeans, P. C.	24	Lee, A. F.	22, 79, 98
Jelks, E.	24	Lee, L. E., Jr.	67, 97
Jenkins, A. M.	77, 97	Leff, W. A.	79, 97
Jenkins, R. T.	77, 90, 96	Legal Medicine and Toxicology	46
Johansmann, R. J.	90	Lehman, J. S.	93
Johnson, R. E.	60	Leiby, G. M.	12, 20
Johnston, C.	12, 19, 39	Lennon, H. C.	90, 94
Johnston, F. R.	55	Lentz, J. C., Jr.	56
Johnston, R. L.	24	Lepore, M. J.	87
Joistad, A. H.	12, 21, 39, 67, 98	Lesko, J. M.	67, 97
Jones, E. P.	45	Lester, D. W.	12, 21, 39, 79, 98
Jones, J. M.	78, 87, 97	Letzing, C. A.	19
Jones, J. W.	92	Levy, E. D.	12, 36
Jones, P. H., Jr.	24	Lewis, G. C.	79, 96
Jones, R. O.	78, 97	Li, P. K.	93
Jones, R. R., Jr.	12, 20, 41, 90	Library	32
Jones, T. T.	12, 19, 39	committee on	23
Journals, medical	32	Lide, T. N.	67, 98
Joyner, A. L.	78, 87, 96	Lightner, C. McG.	?
Joyner, G. W.	78, 90, 97	Lilly, G. M.	90
		Lincicome, R. C.	21, 67, 98

Lipton, M. M.	95
List of medical students	52
Littler, J. W.	56
Loan funds	50
London, A. H., Jr.	12, 20, 46
Lourdeaux, S. J.	60
Lovejoy, J. F.	79, 96
Lovell, D. L.	12, 21, 41, 79, 98
Lowrance, W. W.	22
Lucas, P. W.	67, 96
Lupton, E. S.	22
Lyon, G. M.	24

McAllister, H. A.	79, 98
McAnally, W. J., Jr.	68, 96
McBryde, A. M.	13, 20, 45
McCain, P. P.	13, 20
McCann, W. S.	24
McClure, R. D.	24
MacColl, W. A.	68, 93, 97
MacConnell, J. W.	24
McCracken, J. P.	78, 96
McCrea, F. D.	13, 37
McCulloch, D. J.	53
McCulloch, H.	24
McCulloch, R. P.	60
McFayden, O. L., Jr.	60
McGill, C.	24
McLain, W. C., Jr.	56
McLean, I. W., Jr.	56
McLawhorn, B. C.	78, 98
McMillan, R. L.	79, 87, 98
McNamara, P. J.	79, 96
Madden, J. H. M.	21
Magill, T. P.	87
Magruder, R. G.	87
Mahl, G. K.	80, 92, 98
Major, R. H.	24
Maness, P. F.	60
Mann, F. R.	60
Manning, I. H., Jr.	13, 19, 39, 87
Marsicano, A. R.	80, 96
Margolin, S. J.	80, 97
Margolis, G.	60
Margolis, L. H.	60
Marion, D. F.	80, 97
Markham, C. B.	5
Martin, A. G. M., III	60
Martin, D. S.	13, 20, 29, 38, 39
Martin, D. W.	13, 20, 46, 80, 98
Martin, E. W.	13, 19, 28
Martin, J. M.	93
Martin, J. R.	80, 96
Martzloff, K. H.	24
Massengill, G. K., Jr.	80, 98
Massengill, P. R.	53
Mathematics, requirements in	34
Matthews, A. A.	24
Matthews, E. E., Jr.	91
Mattocks, T. R.	68, 99
Mauzy, C. H.	92
Mayer, W. B.	88
Mayer, W. F.	24
Medical care	32
Medical journals	32
Medical secretarial school	30
Medical social service	30
Medical students, institutions at	64
which prepared	64
Medical students, the states in	65
which born	65
Medicine	39
Doctor of	??
(Junior)	40, 49
(Senior)	40, 49
Mees, T. H.	55
Menefee, E. E., Jr.	80, 88, 97
Merkley, H. E.	68, 96
Messer, A. L.	61

Metcalf, W.	90
Meyer, F. P., Jr.	68, 98
Meyers, M.	61
Mickey, H. C.	19, 29
Microscopes	50
Microscopy, clinical	39, 49
Mignon, J., Jr.	93
Mikell, R. F.	80, 96
Miller, B. N.	80, 88, 98
Miller, J. S.	90
Miller, R. P.	61
Mills, W. H.	61
Mims, L. H., Jr.	61
Moffitt, O. P., Jr.	68, 96
Moise, D. DeL.	56
Montgomery, C. F.	80, 99
Moore, F. R.	80, 96
Morfit, H. M.	21
Moran, F. T.	56
Morgan, J. E.	13, 19, 37, 44
Morrison, A. W.	24
Morrow, A. S.	80, 96
Morrow, R. C., Jr.	68, 96
Morton, H. G.	68, 83, 97
Moseley, V.	13, 39, 81, 98
Moser, L. A.	68, 98
Moss, J. E.	61
Mulholland, H. B.	24
Mullen, R. M., II	81, 96
Muller, M. H.	13, 19, 30
Mulford, E. H., II	61
Munroe, C. A.	21, 68, 98
Munroe, H. S., Jr.	12, 35, 81, 88, 90, 98
Munson, H. T. E.	68, 97
Murphy, J. B.	24
Muse, J. P.	61
Mustard, H. S., Jr.	53
Nahigian, B. H.	53
Nahigian, R.	22
Nalle, B. C., Jr.	13, 37, 68, 98
National Board of Medical Examiners	50
Naumoff, P.	81, 97
Neese, J. H.	53
Neill, R. B.	61
Nesbitt, W. R., Jr.	56
Neumaier, A.	81, 97
Neurath, H.	13, 36
Neurology	40
Neuropsychiatry	40
Neurosurgery	44
Newbern, W. R.	81, 90, 99
Newman, G. C.	22, 68, 98
Nicholson, W. M.	14, 20, 36, 39
Nickau, R. H.	68, 97
Niekirk, W. I.	53
Nitschke, R. E.	81, 97
Nixon, P. I.	24
Nixon, P. I., Jr.	8, 96
Nixon, R. R.	61
Noel, J. H., Jr.	53
Noojin, R. O.	88
Norfleet, E. G.	14
Norton, J. W. R.	14, 46
Nursing, School of	28
Nutrition	37
Oates, M. O.	90, 91, 94
Obstetrics	45, 49
Officers of Administration	5
O'Keefe, A. F.	53
O'Neill, E. A.	56
Ophthalmology	42, 49
Orgain, E. S.	14, 20, 39
Orthopaedics	43, 49
Osler, W.	32
Otolaryngology	43
Ott, J. F.	53
Ould, C. L.	22, 81, 88, 98
Owens, F. L.	81, 90, 98

Iachman, D. J.	81, 93, 96	Public ward patients	25
Palen, G. M.	68, 98	Pudenz, R. H.	82, 90, 99
Palmer, C. B.	24	Pyle, L. A., Jr.	68, 96
Paquet, J. F.	61		
Parasitology	38, 48	Quarters	48, 49
Parfentjev, I. A.	95	Query, R. Z., Jr.	82, 88, 97
Parker, E. F., Jr.	81, 98	Quillian, M. P.	61
Parrish, A. A.	21, 68, 98		
Parrish, M. E.	93	Ralston, R. H.	82, 96
Parsons, P. B.	14, 21, 45, 81, 98	Raney, R. B.	15, 20, 41, 91
Pate, A. H.	81, 97	Rankin, J. W.	22
Pattee, C. J.	14, 45	Rankin, W. S.	15
Pathology	37, 48	Raper, E. S.	29
Patients, public ward	25	Raper, J. S.	69, 98
private	27	Rasmussen, L. P.	82, 93, 99
Patton, W. B.	90	Rausch, N. W.	54
Paullin, J. E.	24	Ray, K. B.	15, 21, 35, 41
Payne, S. A.	88, 92, 94	Reamer, I. T.	15, 19, 39
Pearse, A. S.	14, 38	Record Library	30
Pearse, R. L.	14, 20, 92	Reed, H. L.	82, 97
Peck, J. D., Jr.	53	Reese, F. M.	88
Pediatrics	45, 49	Reeves, R. J.	15, 19, 44
Peele, T. L.	14, 35, 98	Regional representatives	24
Peery, J. McG.	68, 98	Regulations, fees and expenses	50
Pepper, D. S.	88	Reid, C. H., Jr.	56
Penfield, W.	24	Reid, M. R.	24
Perdue, J. R.	92	Reimer, F. N.	56
Perdue, M. R.	53	Reinhardt, J. F.	56
Perlzweig, W. A.	14, 19, 23, 36	Reiser, R.	39
Perkins, P. K.	90	Rent, rooms	50
Perry, R. M.	68, 98	Representatives, regional	24
Perryman, O. C., Jr.	61	Reque, P. G.	82, 88, 96
Perrons, E. L.	14, 20, 37, 39, 88	Requirements, advanced standing	33
Peter, B. K.	92	B.S. degree (medicine)	34
Peters, W. A., Jr.	53	B.S. degree (nursing)	28
Pettus, W. H., Jr.	14, 21, 41	entrance	33
Pfeffer, A. Z.	61	M.D. degree	34
Pharmacology	37, 48	School of Dietetics	28
Phillips, W.	82, 98	School of Nursing	51
Phillipson, E. O.	14, 30	Research fellowships	30
Physical diagnosis	40	Residencies	30
Physics, requirements in	33	Resident staff	20, 21, 22, 31
Physiology	37, 48	Reuter, E. G.	93
Picken, R. L.	53	Richardson, W. P.	15, 46
Pickett, H. F.	19	Ricketson, R. A. G.	56
Pinkerton, M. I.	15, 19, 23, 28	Ricketts, E. T.	82, 95, 99
Pishko, M. T.	82, 98	Ridges, A. J.	24
Platt, L.	93	Rigdon, R. H.	94
Plummer, D. E.	15, 20, 39	Rindge, M. E.	61
Plyler, M. T., Jr.	82, 98	Ritchie, J. A.	54
Podger, K. A.	61	Roach, B. F.	54
Policy of hospital	25	Roberts, L. C.	15, 20, 41, 83, 98
Poole, A. K.	24	Roberts, L. J., Jr.	56
Poole, E. B.	88	Robinson, R. W., Jr.	61
Poole, F. E.	54	Robinson, D. H.	83, 99
Poole, P. P.	61	Robinson, F. H., Jr.	83, 97
Porter, R.	19, 23, 29	Rockwell, F. V.	88
Postgraduate clinics	30	Roentgenology	44
Postgraduate study (medicine)	30	Rogers, J. F.	56
(nursing)	28	Rogers, M. P.	56
(symposium)	30	Roll of students	52
Postlethwait, R. W.	82, 88, 97	Rollins, C. D.	93
Poston, M. A.	15, 20, 38	Roma, H. F.	54
Potter, W. B.	91	Room-rent	50
Powell, N. B.	92	Rosenau, M. J.	15, 46
Powell, W. F.	68, 96	Rosenqvist, B.	56
Present, A. J.	90	Ross, I. S.	22, 69, 98
Preston, J. F., Jr.	82, 94, 99	Ross, L. E.	15, 21, 46
Preu, P. W.	88	Ross, N. F.	15, 20, 41, 95
Preventive medicine	46, 49	Ross, R. A.	16, 20, 23, 44
Private diagnostic clinic	27	Ross, W. T.	69, 96
Private patients	27	Rothey, K. B.	83
Private room rates	27	Ruark, R. J.	90
Proctor, W. V.	22	Ruby, N.	83, 97
Provinsky, L. B.	82, 96	Rucker, E. M.	16, 20, 45, 83, 98
Psychiatry	48	Ruegsegger, J. M.	88
Public Dispensary	26, 27	Ruff, R. F.	54
Staff	19	Ruffin, J.	16, 20, 23, 39
Public health	49	Rumpanos, S.	83, 96

Rundles, R. W.	61	Spence, W. T.	84, 97
Rutherford, R. T., Jr.	61	Spring, W. C., Jr.	84, 97
Rysanek, W. J., Jr.	69, 96	Spring quarter	48, 49
Sachs, J. W.	69, 97	Sprunt, D. H.	17, 20, 23, 37
Sanger, B. J.	24, 90	Stack, D. R., Jr.	62
Sanger, W. P.	90	Staff, administrative	19
Sapp, C. J.	62	Staff, associate	19
Sarett, P. J.	16, 36	Staff, attending	19
Sartin, J. M.	95	Staff, public dispensary	19
Savage, E. D.	62	Staff, resident	20, 31
Sawyer, L. E.	22, 69, 98	Staff, technical	19
Saxe, L. J.	83, 94, 96	Stark, S.	69, 97
Scadron, E. N.	90, 97	Starke, H.	56
Schanher, P. W., Jr.	21, 69, 98	States in which the medical students were born	65
Schechter, A. J.	95	Stauffer, C. C.	62
Schedule of Instruction	46, 47	Stayer, G. E.	84, 91, 96
Public dispensary	26	Steiger, H. P.	62
Sherwood, M. M.	46	Stenhouse, G. C.	62
Schibel, H. M.	90	Stevens, J. B.	17, 21, 39, 84, 88, 98
Schiro, H. S.	88	Stevenson, R. R.	84, 96
Schlayer, C.	18	Stevick, C. P.	84, 93, 98
Schmidt, R. E.	83, 98	Stifel, J. L.	24
Schnoor, T. G.	60, 90, 96	Stiles, H. A.	54
Scholarships	50	Stith, R. B., Jr.	84, 88, 98
School of Dietetics	28	Stocksdale, H. I.	5
Laboratory technique	29	Stone, J. T.	56
Medicine, Curriculum	49	Stone, R. E.	88
Nursing	28	Stone, W. C.	56
Schulze, W.	16, 20, 39, 83, 98	Storey, W. D.	69, 98
Science, Bachelor of (medicine) (nursing)	34, 28	Street, D. M.	90, 91, 94
Scientific journals	32	Street, J. M.	56
Scott, J. G., Jr.	62	Street, M. E., Jr.	85, 96
Sealy, W. C.	16, 21, 41	Strickland, B. A.	85, 96
Second-year curriculum	48	Stroud, G. M., III	17, 21, 39, 69, 98
Seitz, G. D.	92	Stuart, C., Jr.	17, 21, 41
Self, W. O.	83, 98	Student Government	32
Sellars, J. G.	54	Student Technicians committee on	23
Sellers, W. H.	62	Students by classes	52
Semmes, R. E.	24	Students, first year	52
Senior (medicine)	40, 49	Students, second year	54
(surgery)	42, 49	Students, junior	57
Senior students	57	Students, senior	57
Shands, A. R., Jr.	16, 41	Study, postgraduate (medicine) (nursing)	30, 28
Sharp, D. G.	16	Styron, C. W.	69, 93, 97
Sharpe, W. E., Jr.	83, 97	Summary of curriculum	49
Sheehy, J. E.	83, 97	Summer quarter	48, 49
Shepard, K.	93	Surles, D. L.	69, 96
Sherwood, M. M.	46	Surgery	41
Shields, R. A., Jr.	62	(Junior)	42, 49
Shields, R. K.	83, 98	(Senior)	42, 49
Shinners, B. M.	84, 93, 97	Sutherland, A. R.	56
Siegel, A.	54	Sutherland, G. F.	57
Siegel, I. M.	84, 97	Swett, F. H.	17, 23, 35
Silver, G. A., III	84, 93, 97	Swingle, H. F., Jr.	85, 88, 97
Simpson, P. E.	62	Symposium, postgraduate	30
Sinden, R. H.	54	Syphilology	40
Slemmons, J. M.	24	Syvertson, J. T.	88
Smart, G. F.	62	Szanton, V. L.	85, 96
Smith, A. R.	84, 90, 96		
Smith, A. T.	20		
Smith, D. T.	16, 19, 20, 23, 29, 38, 39, 46		
Smith, J. G.	84, 98	Taliaferro, R. M.	62
Smith, O. N.	16, 20, 39, 88	Tanenbaum, S.	94
Smith, P.	16, 39	Tannenbaum, A. J.	85, 98
Smith, R. C.	69, 96	Taylor, A. R.	17, 41
Smith, R. E.	88	Taylor, H. G.	62
Smith, S. G.	16, 39	Taylor, H. M.	17, 20, 23, 29, 36, 46
Smith, W. C.	56	Taylor, W. L., Jr.	85, 99
Smoot, J. L.	94	Templeton, R. G.	57
Snedegar, P. D.	62	Therapeutics	40
Snipes, R. D.	56	Terms, dates	4, 48, 49
Snively, M. H.	16, 29	Thetford, J. D.	17, 21, 39, 69, 98
Social service, medical	30	Third-year class	57
Sotirion, G. A.	62	Third-year curriculum	49
Spaeth, W., Jr.	54	Thomas, A. H.	56
Speed, J. A.	17, 32	Thomas, J. B.	17, 32
Speir, R. C., Jr.	62	Thomas, R. Z.	95
Spekter, L.	93	Thomas, W. L., Jr.	17, 20, 45, 92

Thomason, R. H.	85, 93, 99	Wehs, R. J.	90
Thompson, E. D.	54	Weitz, F.	93
Thompson, K. R., Jr.	54	Welch, J. H.	63
Thompson, M. D.	24	Wellman, G. O.	54
Thompson, S. V.	93	Wells, W. L.	18, 21, 41, 70, 98
Thompson, W. G.	62	Wesson, T. W.	86, 97
Thornhill, E. H.	22, 69, 98	Weston, W.	24
Thornhill, G. T., Jr.	62	Wexler, I. B.	70, 97
Thornhill, P. M. S.	62	Weyrauch, H. M.	91
Thornhill, R. P.	63	Whilden, J. G.	18, 86, 90, 98
Thornton, W. F.	93	Whitaker, C. S.	70, 97
Three-quarter schedule	48	Whitaker, R. B., Jr.	63
Thurston, H. B.	56	White, J. E.	28
Timberlake, L. F.	63	White, M. B.	86, 96
Timmons, J. M.	63	Whitley, R. M., Jr.	63
Timmons, J. R.	69, 97	Whitt, W. E., Jr.	56
Trachtenberg, W.	69, 96	Widmark, W. L.	63
Trent, J. C.	22	Wiggins, J. B.	95
Trout, H. H.	24	Wilbur, E. L.	94
Trout, P. C.	63	Wiley, W. R.	86, 98
Troxler, E. R.	22, 69, 98	Wilkinson, W. E.	86, 90, 94, 96
Tuition, School of Medicine	50	Williams, J. E.	86, 94, 99
School of Nursing	28	Williams, P. M.	18, 21, 39
Tuillis, J. L.	63	Williams, R.	88, 93
Tumor clinic	44	Williams, W. H., Jr.	54
Tupper, J. A., Jr.	63	Willis, C. A.	86, 97
Turner, A. F.	85, 97	Wills, T. W.	57
Turner, L.	69, 96	Willson, P., Jr.	63
Uhde, G. I.	85, 96	Wilson, D. A.	22
Upchurch, S. E.	17, 20, 41	Wilson, J. E.	90
Upchurch, T. G.	85, 98	Wilson, J. McL.	54
Urology	43	Wilson, J. M.	21
Vacation dates	4	Wilson, J. R.	86, 97
Valk, H. L.	56	Wilson, J. S.	86, 99
Van Arsdall, C. B., Jr.	17, 39, 85, 98	Wilson, R. A.	70, 96
Van Arsdall, T. C.	54	Wilson, W. W.	86, 96
Vandergrift, H. N., Jr.	56	Windsor, R. G.	91
Vanderlinde, R. J.	54	Winstead, G. A.	63
Vanhoy, I. M.	69, 97	Winter quarter	48, 49
Varner, P. H.	69, 96	Wintrup, C. K.	56
Veale, N. C.	70, 96	Wise, N. B.	18, 38, 39
Venning, W. L., Jr.	22, 63	Withers, W. A.	95
von Glahn, H. D.	56	Women students	33
Waddell, M. C.	85, 96	Wood, C. T.	86, 98
Wadsworth, J. A. C., II	70, 97	Wood, H.	94
Walker, R. H.	88, 95	Wood, R. C.	63
Wall, G. R.	63	Wood, W. R.	18, 21, 32
Wallace, J. E.	54	Woodard, M. W.	54
Wallace, W. S.	18, 20, 44	Woodhall, B.	19, 41
Waller, L. C.	56	Woodruff, W. E.	63
Walp, F. M. J.	70, 98	Woolsey, F. M., Jr.	70, 96
Walsh, R. E.	63	Wortman, H. C., Jr.	56
Wannamaker, W. H.	5	Wren, J. C.	70, 93, 97
Ward, N. E., Jr.	85, 98	Wright, DeW.	22
Ward rates	25	Wulfman, W. A.	56
Waters, C. H., Jr.	18, 20, 41	Wyvell, D. B.	70, 96
Watson, G. A., Jr.	70, 98	Yates, A.	18, 20, 36
Weatherford, W. J.	86, 97	Young, C., Jr.	54
Webb, R. C.	70, 97	Young, D. A.	89
Webster, N. M.	18, 21, 70, 98	Young, W. V.	56
Weekes, D. J.	63	Youngstrom, K. A.	18, 35
Weeks, K. D.	21, 70, 98	Ziv, L. B.	91
Weeks, T. W.	56	Zurkow, G. A.	22



VOLUME 12

November, 1939

NUMBER 2

BULLETIN OF DUKE UNIVERSITY

The School of Nursing
1939



PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL CATALOGUES AND BULLETINS

For GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

For BULLETIN OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY
THE SCHOOL OF NURSING



1939

DURHAM, NORTH CAROLINA
1939



NURSES' HOME

HOSPITAL

MEDICAL SCHOOL

FOREWORD

This bulletin is issued for prospective students of nursing. Admissions into any class are made only on the understanding that every decision of the School of Nursing Committee shall apply to all students, even though it is made subsequently to their enrollment in the School. At frequent intervals the Committee reviews the records of all students, and those whose progress has been unsatisfactory may be required to leave the School. ONLY THOSE WILL BE ADVANCED WHO, IN THE OPINION OF THE COMMITTEE, GIVE PROMISE OF BEING A CREDIT TO THEMSELVES AND TO THE SCHOOL.

SCHOOL OF NURSING AND HOSPITAL CALENDAR 1939-1940

1939

Nov. 30. Thursday—Thanksgiving Day: a holiday.

Dec. 16. Saturday—Autumn Quarter ends.

1940

Jan. 2. Tuesday—Winter Quarter begins.

March 16. Saturday—Winter Quarter ends.

March 25. Easter Monday: a holiday.

March 26. Tuesday—Spring Quarter begins.

June 3. Monday—Commencement.

June 8. Saturday—Spring Quarter ends.

June 17. Monday—Summer Quarter begins.

July 4. Thursday—Independence Day: a holiday.

Aug. 31. Saturday—Summer Quarter ends.

Sept. 26. Thursday—Registration of students, and Autumn
Quarter begins.

OFFICERS OF ADMINISTRATION

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., Litt.D., LL.D.
President of the University

ROBERT LEE FLOWERS, A.M., LL.D.
Vice-President, Secretary, and Treasurer

WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D.
Vice-President

CHARLES BLACKWELL MARKHAM, A.B., A.M.
Assistant Treasurer

MARGARET ISABEL PINKERTON, R.N., B.S.
Dean of the School of Nursing

FACULTY OF THE SCHOOL OF NURSING

BESSIE BAKER, R.N., B.S.

Dean Emeritus of the School of Nursing

Diploma, Johns Hopkins Hospital School of Nursing, 1902; Assistant Director of Nursing, Women's Hospital, 1910-12; Assistant Director of Nursing, Johns Hopkins Hospital, 1912-17; Chief Nurse, Base Hospital No. 18, A. E. F., 1917-19; B.S. and Diploma in Administration in Schools of Nursing, Teachers College, Columbia University, 1922; Director of Nursing at Charles T. Miller Hospital, St. Paul, and Assistant Professor of Nursing, University of Minnesota, 1922-30; Dean of the School of Nursing and Professor Nursing Education, Duke University School of Nursing, 1930-39.

MARGARET ISABEL PINKERTON, R.N., B.S.

Dean of the School of Nursing and Professor of Nursing Education

Diploma, University of Virginia Hospital School of Nursing, 1927; Assistant Superintendent of Nurses, Stuart Circle Hospital, Richmond, Va., 1928-30; Hostess, University of Virginia Hospital, 1930-31; Assistant Superintendent of Nurses, University of Virginia Hospital, 1931-35; B.S. in Nursing Education, Teachers College, Columbia University, 1936; Nursing Arts Instructor, Washington University School of Nursing, St. Louis, Mo., 1936-37; Superintendent of Nurses, Barnes Hospital, 1938-39; *Dean of the School of Nursing and Professor of Nursing Education, 1939—*.

ANN HENSHAW GARDINER, R.N., B.S., M.S.

Assistant Professor of Nursing Education

Diploma and Teaching Certificate, Shepherd College State Normal, Shepherdstown, W. Va., 1909; taught public schools, 1909-11; Theoretical and Practical Instructor, St. Luke's Hospital, New Bedford, Mass., 1914-17; U. S. Base Hospital No. 6, A. E. F., 1917-19; Superintendent of Nurses, Bridgeport Hospital, Bridgeport, Conn., 1920-21; B.S. and Teacher's Diploma, Teachers College, Columbia University, 1923; Educational Director, Baylor University School of Nursing, Dallas, Texas, 1922-24; Premedical course, University of Washington, Seattle, Wash., 1925; Director of Education, Stanford University School of Nursing, 1925-26; M.S., Kansas State Agricultural College, 1927; Director of Education, Flushing Hospital, Flushing, N. Y., 1927-30; *Assistant Professor of Nursing Education, 1930—*.

MATILDA E. HOLLEMAN MOSELEY, R.N., A.B., B.S.

Instructor in Principles and Practice of Nursing

A.B., Duke University, 1931; Diploma, Duke University School of Nursing, 1934; Ward Management and Teaching, Frances Bolton School of Nursing, Cleveland, Ohio, 1935; B.S. in Nursing, Duke University School of Nursing, 1936; Supervisor of Surgical Service and Instructor in Surgery, Duke Hospital, 1936-39; *Instructor in Principles and Practice of Nursing, 1939—*.

JULIA ELIZABETH WHITE, A.B., R.N.

First Assistant to the Dean

A.B., Newberry College, Newberry, S. C., 1927; Diploma, Johns Hopkins Hospital School of Nursing, 1930; Head Nurse, Assistant Night Supervisor, Harriet Lane Home, Johns Hopkins Hospital, 1930-32; Assistant Night Supervisor, Duke Hospital, 1933-36; *Assistant to the Dean, 1936—*.

HILDA CLAIRE BURNHAM, R.N.

Second Assistant to the Dean

Diploma, Johns Hopkins Hospital School of Nursing, 1930; Head Nurse, Isolation Ward, Johns Hopkins Hospital, 1930-31; Assistant Night Supervisor, Johns Hopkins Hospital, 1931-33; Night Supervisor, Osler Medical Clinic, Johns Hopkins Hospital, 1933-34; Assistant Supervisor and Ward Instructor, Osler Medical Clinic, Johns Hopkins Hospital, 1934-37; Medical Supervisor and Instructor in Medicine, Duke Hospital, 1937-39; *Second Assistant to the Dean, 1939—*.

EDITH HINVES, R.N.

Instructor and Supervisor of Nursing Service in Dispensary

Diploma, Johns Hopkins Hospital School of Nursing, 1923; Head Nurse, Operating Room, Johns Hopkins Hospital, 1923-25; Assistant Supervisor Operating Room, Johns Hopkins Hospital, 1925-26; Assistant Supervisor Dispensary, Johns Hopkins Hospital, 1926-27; Operating Room Supervisor and Part-time Instructor, Palmerton Hospital, Palmer-ton, Pa., 1927-33; *Supervisor Nursing Service in Dispensary, 1933—.*

MARION FRANCES BATCHELDER, R.N.

Instructor in Operating Room Technique, Supervisor of the Operating Room

Diploma, Peter Bent Brigham Hospital School of Nursing, 1920; Head Nurse, 1921-23; Supervisor of Operating Room, Peter Bent Brigham Hospital, 1923-27; Head Nurse, Operating Room, Johns Hopkins Hospital, 1927-30; *Supervisor of Operating Room, 1930—.*

MILDRED M. SHERWOOD, R.N.

Instructor in Pediatrics and Supervisor of Pediatric Service

Diploma, Mount Sinai Hospital, New York City, 1923; Head Nurse, Mount Sinai Hospital, 1923-26; Head Nurse, Johns Hopkins Hospital, 1926-30; *Instructor in Pediatrics and Supervisor of Pediatric Service, 1930—.*

JANE McCABE IRVINE, R.N., B.S.

Instructor in Obstetrics and Gynecology, and Supervisor of Obstetrical and Gynecological Service

Graduate in Nursing, University of Minnesota School of Nursing, 1934; B.S. in Nursing Education, University of Minnesota, 1935; Obstetrical Supervisor, Minnesota General Hospital, Minneapolis, Minn., 1935-37; *Supervisor, Obstetrics and Gynecology, 1937—.*

ANNIE SHARP KLENNER, R.N., B.S.

Instructor in Medicine and Supervisor of Medical Service

Diploma, Duke University School of Nursing, 1934; General Duty, Duke Hospital, 1934-35; B.S., 1937; Head Nurse, Duke Hospital, 1937-38; Operating Room Nurse, Forsyth County Sanatorium, Winston-Salem, N. C., 1938-39; Night Supervisor, Duke Hospital, 1939; *Medical Supervisor and Instructor in Medicine, 1939—.*

RUBY BEATRICE JAMES, R.N.

Instructor in Surgery and Supervisor of Surgical Service

Diploma, Washington University School of Nursing, 1930; Head Nurse, Barnes Hospital, St. Louis, Mo., 1930-36; Admitting Officer, Barnes Hospital, St. Louis, Mo., 1936-39; *Instructor in Surgery and Supervisor of Surgical Service, 1939—.*

LILLIAN M. SMILEY, R.N.

Assistant Instructor in Principles and Practice of Nursing

Diploma, Washington University School of Nursing, 1930; Public Health, St. Louis, Mo., 1930-34; Private Duty, St. Louis, Mo., 1934-37; Head Nurse, Research Hospital, Kansas City, Mo., 1937; Nursing Arts Instructor, Nashville General Hospital, Nashville, Tenn., 1938; *Assistant Nursing Arts Instructor, 1939—.*

RUTH BARTON, R.N., B.S.

Second Assistant Instructor in Principles and Practice of Nursing

Diploma, Duke University School of Nursing, 1939; B.S., 1939; *Assistant Practical Nursing Instructor, 1939—.*

ANN M. HUGHES, A.B.

Laboratory Assistant

A.B., Duke University. 1938; *Laboratory Assistant, Duke University School of Nursing, 1938—.*

AUGUSTA LANTON, R.N., B.S.

Night Supervisor

B.S., Florida State College for Women, 1921; Diploma, Johns Hopkins Hospital School of Nursing, 1926; District Nurse, Co-operative Nursing Association, Charlotte, N. C., 1928-30; Night Supervisor, Duke Hospital, 1930-36; Head Nurse, Maternity Clinic, Charlotte, N. C., 1936-39; *Night Supervisor, 1939—*.

MARGARET KUYKENDAL, R.N., B.S.

Assistant Night Supervisor

Queens College, Charlotte, N. C., 1928-30; Diploma, Duke University School of Nursing, 1934; B.S. in Nursing, Duke University, 1938; General Duty, Duke Hospital, 1934-36; Assistant Night Supervisor, 1936-37; Evening Supervisor, 1937-39; *Assistant Night Supervisor, 1939—*.

MARY C. WILLIAMS, R.N.

Assistant Night Supervisor

Diploma, Duke University School of Nursing, 1936; Pediatrics Supervisor, Sternberger Hospital, Greensboro, N. C., 1937; Medical Social Worker, North Carolina Commission for the Blind, Raleigh, N. C., 1937-39; Night Supervisor, Sternberger, Hospital, Greensboro, N. C., Feb., 1939-Nov., 1939; *Assistant Night Supervisor, Nov. 1939—*.

MARGARET PEELE, R.N., B.S.

Evening Supervisor

Diploma, Duke University School of Nursing, 1937; B.S., 1937; Assistant Head Nurse, Duke Hospital, 1937-39; *Evening Supervisor, 1939—*.

ASSISTANT SUPERVISORS AND HEAD NURSES

CREDITH LOY, R.N.

Assistant Supervisor of the Operating Room

Diploma, University of Kansas School of Nursing, 1926; Postgraduate work, Johns Hopkins Hospital, 1927; Surgical Supervisor, University of Kansas Hospital, 1927-29; Second Assistant Surgical Supervisor, Assistant Surgical Supervisor, Johns Hopkins Hospital, 1929-32; Assistant Surgical Supervisor, St. Luke's Hospital, Cleveland, Ohio, 1933; *Assistant Supervisor of the Operating Room, 1933—*.

MILDRED CARTER RIDDLE, R.N.

Head Nurse, Medical Clinic, Assistant Supervisor of Public Dispensary

Stewart Hall, Staunton, Va., 1923-25; Diploma, University of Virginia School of Nursing, 1927; Industrial Nursing, 1927-30; Duke Hospital Dispensary, 1930-34; *Head Nurse, Medical Clinic, Assistant Supervisor of Public Dispensary, 1938—*.

VIDA M. WOLFORD, R.N.

Head Nurse on Private Medical Ward

Diploma, Winchester Memorial Hospital, Winchester, Va., 1923; Night Supervisor, Winchester Memorial Hospital, 1923; Postgraduate course, St. Mary's Hospital, Rochester, Minn., 1924; Assistant Director of Nurses, Winchester Memorial Hospital, 1925-26; Operating Room Supervisor, Holzer Hospital, Gallipolis, Ohio, 1926; Private Duty, 1926-29; Supervisor, Postgraduate School of Medicine, University of Pennsylvania, 1929-34; *Head Nurse, Private Medical Ward, 1934—*.

MADELINE MABLE DAVIS, R.N.

Head Nurse on Women's Medical Ward

Diploma, Sinai School of Nursing, Baltimore, 1935; General Duty, 1935-38; *Head Nurse, Women's Medical Ward, 1938—*.

FRANCES M. KLEIN HENDERSON, R.N.

Head Nurse on Men's Medical Ward

Diploma, Duke University School of Nursing, 1934; General Duty, 1934-35; Assistant Head Nurse, 1935-36; Head Nurse, Duke Hospital, 1936-37; General Duty, Emergency Hospital, Washington, D. C., 1937-38; *Head Nurse, Men's Medical Ward, 1938—*.

NOLIE HOBGOOD LYON, R.N.

Head Nurse on Medical and Surgical Ward

Diploma, Watts Hospital School of Nursing, 1932; Private Duty, 1932; General Duty, Duke Hospital, 1932-37; *Head Nurse, Medical and Surgical Ward, 1937—*.

JULIA JANE BRADSHAW, R.N.

Head Nurse on Private Surgical Ward

North Carolina College for Women, 1919-20; Diploma, Duke University School of Nursing, 1934; Assistant Head Nurse, Medical Ward, 1934-36; *Head Nurse, Private Surgical Ward, 1936—*.

MONICA A. TRETTER, R.N.

Head Nurse on Women's Surgical Ward

Diploma, University of Pennsylvania Hospital, 1934; General Duty, University of Pennsylvania Hospital, Philadelphia, Pa., 1934; Supervisor, University of Pa. Hospital, 1935-37; Night Supervisor, Halifax District Hospital, Daytona Beach, Fla., 1938; Private Duty, University of Pennsylvania Hospital, 1938-39; *Head Nurse, Women's Surgical Ward, 1939—*.

MARGARET REBECCA HERMAN, R.N., A.B., B.S.

Head Nurse on Men's Surgical Ward

A.B., Lenoir Rhyne College, Hickory, N. C., 1931; Diploma, Duke University School of Nursing, 1934; B.S., 1938; General Duty, Duke Hospital, 1934-36; *Head Nurse, Men's Surgical Ward, 1936—*.

ROSABELLE WEHUNT, R.N.

Head Nurse on Women's Surgical Ward

Diploma, Duke University School of Nursing, 1936; General Duty, Duke Hospital, 1936-37; *Head Nurse, Women's Surgical Ward, 1937—*.

VERA VIRGINIA THOMAS, R.N.

Head Nurse on Men's Surgical Ward

Diploma, Duke University School of Nursing, 1935; General Duty, 1935-36; *Head Nurse, Men's Surgical Ward, 1936—*.

PAULINE A. MARTIN, R.N.

Head Nurse on Colored Obstetrical and Gynecological Ward

Diploma, Duke University School of Nursing, 1937; Head Nurse, Obstetrical and Gynecological Ward (White), 1937-39; *Head Nurse, Obstetrical and Gynecological Ward (Colored), 1939—*.

LECTURERS

HELGE LUNDHOLM, Ph.D.....	Psychology
HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D.....	Chemistry
BAYARD CARTER, A.B., B.S., M.A., M.D.....	Obstetrics and Gynecology
RICHARD BEVERLY RANEY, A.B., M.D.....	Orthopedics
LENOR DIAL BAKER, M.D.....	Orthopedics
EDWIN PASCAL ALYEA, S.B., M.D.....	Urology

ANGUS MURDOCH MCBRYDE, B.S., M.D.....	<i>Pediatrics</i>
JAY MORRIS ARENA, B.S., M.D.....	<i>Pediatrics</i>
JEROME SYLVAN HARRIS, A.B., M.D.....	<i>Communicable Diseases</i>
DOUGLAS HAMILTON SPRUNT, B.S., M.S., M.D.....	<i>Pathology</i>
WILLIAM BANKS ANDERSON, A.B., M.D.....	<i>Ophthalmology</i>
WATT WEEMS EAGLE, A.B., M.D.....	<i>Otolaryngology</i>
DONALD STOVER MARTIN, A.B., M.D.....	<i>Bacteriology</i>
MABEL PAGE GORDON, A.B.....	<i>Physical Therapy</i>
RAYMOND S. CRISPELL, A.B., M.D.....	<i>Neuropsychiatry</i>
ROBERT JAMES REEVES, A.B., M.D.....	<i>Roentgenology</i>
JASPER LAMAR CALLAWAY, B.S., M.D.....	<i>Dermatology and Syphilology</i>
JESSE HARRISON EPPERSON, B.S.....	<i>Public Health</i>
KARL ARDEN YOUNGSTROM, A.B., M.A., Ph.D.....	<i>Anatomy</i>
SAMUEL EARLE UPCHURCH, B.A., M.D.....	<i>Surgery</i>
WILLIAM SCHULZE, B.S., M.D.....	<i>Medicine</i>
HENRY IRVING KOHN, A.B., Ph.D.....	<i>Physiology</i>
HAROLD BROWN, A.B., M.S., Sc.D., Dr.P.H., M.D.....	<i>Public Health</i>

REGIONAL REPRESENTATIVES

Miss Clara Dennison, Director of School of Nursing, Strong Memorial Hospital, Rochester, N. Y.

Mrs. Cora Hodges, Superintendent of Nurses, Florida East Coast Hospital, St. Augustine, Fla.

Miss Margaret Anne March, 350 McDonald Avenue, Mobile, Ala.

Miss Sena Peterson, Superintendent of Nurses, Swedish Hospital, Minneapolis, Minn.

Miss Laura M. Grant, Associate Professor, Yale School of Nursing, New Haven Hospital, New Haven, Conn.

Mrs. J. W. Dunlap, 2330 St. John's Avenue, Jacksonville, Fla.

Mrs. Marcia Mayfield Mathews, Harris Apartments, Van Buren Avenue, Oxford, Miss.

Miss Ardena Reber, Instructor in Nursing Arts, Western Reserve School of Nursing, Cleveland, Ohio.

THE SCHOOL OF NURSING

GENERAL INFORMATION

The School of Nursing of Duke University was established in 1925 in connection with the School of Medicine of the University and Duke Hospital through the munificent gift of the late James B. Duke.

The plan of the School is to give a sound basic course in Nursing Education which will prepare young women to give intelligent nursing care to the sick in hospitals and homes of the community as well as an introduction to the problems of community health and preventive medicine.

The administration of the School is in the hands of the School of Nursing Committee, under the general direction of the Executive Committee of the School of Medicine.

FACILITIES OF THE HOSPITAL

Duke Hospital has every modern convenience for the diagnosis, proper care, welfare, and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. It has 456 beds, including 50 bassinets for newly born infants; 113 additional beds will be available in 1940. *Medicine*, including dermatology, neurology, and psychiatry, has 111 ward beds; *surgery*, including urology, otolaryngology, ophthalmology, and orthopedics, 105 ward beds; *obstetrics*, including gynecology, 56, and 50 bassinets; and *pediatrics*, 52. There are 82 private rooms and semiprivate cubicles, 7 operating rooms, 4 obstetrics delivery rooms, and accommodations for a resident staff of 71. Duke University School of Nursing is a member of the American Association of Collegiate Schools. The Hospital has been approved for internship and residences by the Council on Medical Education and Hospitals of the American Medical Association.

Through the generosity of Dr. Robert S. Carroll, Highland Hospital, Asheville, N. C., has been presented to the University to form the therapeutic division of the Department of Psychiatry. Dr. Carroll will continue as Director of Highland Hospital. The School of Nursing at Highland Hospital offers training for those who wish to prepare themselves for psychiatric nursing. Those interested should apply to Dr. Robert S. Carroll, Highland Hospital, Asheville, N. C.

FACILITIES FOR INSTRUCTION

The facilities for instruction include the undergraduate colleges of the University, the School of Medicine, and the Duke Hospital.

LIBRARIES

The reference library of books and periodicals of special interest to students majoring in nursing is located in the Hospital Library. The students may use the general libraries on both campuses.

RESIDENCE

The students are housed in the fireproof residence located near the Hospital. It is adequately equipped with blankets and linen, making further provision by the student unnecessary.

HEALTH REGULATIONS AND PHYSICAL EDUCATION

The School has general supervision of the student's health. All physical defects, such as defective vision, dental needs, etc., must be corrected before admission to the School. The student must have been immunized against typhoid fever, and vaccinated against smallpox during the current year. All students are required to pass a physical examination before admission to the School of Nursing and at intervals thereafter, a final examination being given at the end of the course. Exercises for two periods a week during the first two quarters is required of all students.

ACTIVITIES OFFERED

Autumn Quarter (October to December): Hockey, swimming, tennis, moderate sports, and hiking.

Winter Quarter (January to March): Informal gymnastics, Danish gymnastics, apparatus, games, individual gymnastics, folk dances, clogging, interpretative dancing, swimming, and basketball.

Spring Quarter (March to June): Tennis, swimming, baseball, track, field events, and archery.

ADMISSION REQUIREMENTS

Application forms may be obtained by writing to the Dean, Duke University School of Nursing, Durham, N. C. They must be typed, a 2 x 2½ inch recent photograph attached, and the application returned to the Dean as soon as possible. Applications are considered in the order received. If the information is satisfactory, a personal interview with the Committee or a Regional Representative will be arranged for the applicant. The candidate is notified as soon as possible whether she has been accepted or declined; if accepted, the student must send in a deposit of twenty-five dollars (\$25) within two weeks to insure enrollment. This money is applied toward her tuition. Students are admitted only at the beginning of the Autumn Quarter, but applications are considered, and a decision with regard to Admission is made after January 1 of that year. Students are matriculated in the School of Nursing on September 26, 1940.

1940

The requirements for the class entering in 1940 are completion of one year of acceptable college work in an accredited college or university. Students entering in 1940 are eligible for the diploma of graduate nurse after three years in the School of Nursing. Those who have had or who take a second year of acceptable college work are eligible for the degree of Bachelor of Science in Nursing. The college courses suggested are those listed for the 1941 class.

The following college courses are required for admission:

	Approx. S.H.
English Composition, one year.....	6
General Inorganic Chemistry, one year.....	8
Zoology, one year	8
*Electives	8
<i>Total</i>	<u>30</u>

1941 and Succeeding Years

The requirements for the class entering in 1941 are the completion of two years of acceptable college work (60 semester hours) in an accredited college or university. Students entering in 1941 are eligible both for the diploma of graduate nurse and the degree of Bachelor of Science in Nursing after three years in the School of Nursing.

The following college courses are required for admission:

	Approx. S.H.
English Composition, one year.....	6
General Inorganic Chemistry, one year.....	8
General Zoology, one year.....	8
General Physics, one year.....	8
*Electives	30-34
<i>Total</i>	<u>60-64</u>

EXPENSES

The estimated cost for the three years' course is approximately \$340, distributed as follows:

	Total
Tuition Fee \$100 per year.....	\$300
Incidentals \$10 per year.....	30
Commencement Fee	8

Incidental expenses include special books, excursions, student activity fees, etc.

The Tuition Fee is payable as follows:

- First year, \$25 upon acceptance by the School
 - \$25 upon registration, September 26, 1940
 - \$50 on January 1, 1941
- Second and third years, \$50 on October 1 and \$50 on January 1.

There will be a refund of \$25 to students who leave the School within one month of registration. The tuition includes room, board, laundry, uniforms, and some of the textbooks. The expenses of the two years of college work, which are required for the Bachelor of Science degree, are borne by the student.

* Electives may be chosen from any of the following fields: history; political science or economics; mathematics; English literature; foreign language (if foreign language is elected, the second year in college or the second year of college language based on two high-school units should be completed). A semester of general psychology and a year of sociology are strongly recommended.

READMISSION

Students who are absent for more than one month through illness or leave of absence may be readmitted to the same or a succeeding class at the discretion of the Committee.

VACATIONS

Each year is divided into four quarters of three months each. The first-year students have vacations of two weeks at Christmas and two weeks during the summer. Junior and Senior students have vacations of one month each.

COURSES OF INSTRUCTION

Anatomy and Physiology.—Lectures, laboratory work, demonstrations.

DR. YOUNGSTROM, DR. KOHN, MISS GARDINER

Chemistry.—Lectures are supplemented by typical laboratory experiments and discussion of general, organic, and physiological chemistry.

DR. TAYLOR, MISS GARDINER

Bacteriology.—The relation of pathogenic organisms to the cause, prevention, spread and control of communicable diseases; lectures and laboratory work.

DR. MARTIN, MISS GARDINER

Pathology.—Lectures, demonstrations, and discussion.

DR. SPRUNT, MISS GARDINER

Elementary Materia Medica.

MISS GARDINER

Advanced Materia Medica.

MISS GARDINER

Elementary Psychology.—Fundamental principles underlying human conduct.

DR. LUNDHOLM

Applied Psychology.

MISS GARDINER

Professional Adjustments I.

MISS PINKERTON

Professional Adjustments II.

MISS GARDINER, MR. J. BRADWAY

History of Nursing.—The course consists of lectures, recitations, lantern-slides, and collateral reading.

MISS GARDINER

Nursing Arts I.—Introduction to nursing, ethics, and hospital economics.

MRS. MOSELEY

Nursing Arts II.—Principles of elementary nursing procedures, including bandaging.

MRS. MOSELEY

Nursing Arts III.—Demonstrations and practice in the classroom and supervised experience on the wards.

MRS. MOSELEY AND SUPERVISORS

Nursing Care Plan.—The relation of the patient to his social background.

MRS. KLENNER

Senior Demonstration.—A review of nursing procedures.

MRS. MOSELEY AND SUPERVISORS

Nutrition, Foods, and Cookery.

MRS. MARTIN

Dietetic Therapy.

MRS. MARTIN

Sociology.

MISS GARDINER

Social Service.

MISS GARDINER, MISS PERRY GIBSON

Introduction to Community Health.—The fundamental laws of health with relation to the teaching function of the nurse.

MISS GARDINER

Preventive Medicine and Public Health.—Public Health Nursing in its relation to the modern health program.

DR. BROWN, DR. EPPERSON AND ASSISTANTS, MISS GARDINER

Medical Diseases and Medical Nursing.

DR. SCHULZE, MRS. KLENNER

Dermatology.	DR. CALLAWAY, MISS GARDNER
Neurology and Psychiatry.	DR. CRISPELL, MISS GARDNER
General Surgical Diseases and Surgical Nursing.	ASSISTANT RESIDENT, MISS JAMES
Operating Room Technique.	MISS BATCHELDER
Orthopedics.	DR. RANEY, DR. LENOX BAKER, MISS JAMES
Urology.	DR. ALVEA, MRS. MOSELEY
Otology, Rhinology, and Laryngology.	DR. EAGLE, MISS GARDNER
Ophthalmology.	DR. ANDERSON, MISS GARDNER
Gynecology and Gynecological Nursing.	DR. CARTER, MISS IRVINE
Obstetrics and Obstetrical Nursing.	DR. CARTER, MISS IRVINE
Pediatrics and Pediatric Nursing.	DR. MCBRYDE, DR. ARENA, MISS SHERWOOD
Communicable Diseases.	DR. HARRIS, MRS. KLENNER
X ray.	DR. REEVES, MRS. KLENNER
Dental Hygiene.	DR. ATWOOD, MRS. KLENNER
Allergy.	DR. HANSEN-PRÜSS, MRS. KLENNER
Basal Metabolism.	DR. JOHNSTON, MRS. KLENNER
Physical Therapy.	MISS GORDON
Posture.—Faulty posture, deviation of the spine, weak feet, corrective gymnastics.	MISS GORDON

CURRICULUM

FIRST YEAR

<i>Autumn Quarter</i>				<i>Winter Quarter</i>			
Hours				Hours			
Lect., Class	Lab.	Total		Lect., Class	Lab.	Total	
Anatomy and Physiology	49	63	112	Nursing Arts II	44	55	99
Chemistry	33	22	55	Bacteriology	22	22	44
History of Nursing	33		33	Elem. Materia Medica	22	11	33
Elem. Psych.	22		22	Nutrition, Foods, and Cookery	22	22	44
Introd. to Commun. Health	22		22		110	110	220
Nursing Arts I	22	11	33	Ward Practice	18 hours weekly		
Posture	3	8	11				
Prof. Adj. I	11		11				
	195	104	298				

Physical Education 2 hours a week the first and second quarter.

Spring Quarter

	Hours		
	Lect., Class	Lab.	Total
Nursing Arts III...	33	33	66
Nursing Care Plan..	6	5	11
Physical Therapy ..	4	12	16
Adv. Materia Medica	33		33
Dietetic Therapy ...	44		44
	<hr/> 120	<hr/> 50	<hr/> 170

Summer Quarter

Vacation	2 weeks
Ward Practice	8 hours daily

SECOND YEAR

Autumn Quarter

	Hours	
	Lect., Class	Total
Pathology	22	22
Medicine	33	33
Surgery	33	33
Oper. Rm. Tech. ...	11	11
Orthopedics	22	22
	<hr/> 121	<hr/> 121

Winter Quarter

	Hours	
	Lect., Class	Total
Gynecology	22	22
Urology	22	22
Special Therapeutics.	22	22
Communicable Diseases	33	33
	<hr/> 99	<hr/> 99

Spring Quarter

	Hours	
	Lect., Class	Total
Applied Psych.	22	22
Ear, Nose, & Throat	22	22
Sociology	33	33
	<hr/> 77	<hr/> 77

Summer Quarter

Vacation	4 weeks
Ward Practice	8 hours daily

THIRD YEAR

Autumn Quarter

	Hours	
	Lect., Class	
Obstetrics	44	
Pediatrics	44	
	<hr/> 88	

Winter Quarter

	Hours	
	Lect., Class	
Psychiatry	33	
Eye	11	
Dermatology	11	
Senior Demonstration	11	
	<hr/> 66	

Spring Quarter

	Hours	
	Lect., Class	
Prof. Adj. II	22	
Preventive Med. & Public Health	22	
Social Service	22	
	<hr/> 66	

Summer Quarter

Vacation	4 weeks
Ward Practice	8 hours daily

Clinical Experience After the First
Six Months

Medical Wards	5½ months
Surgical Wards	5½ months
Diet Kitchen	1 month
Gynecological Wards	1 month
Operating Department	2 months
Out-Patient Department	2 months
Private Wards	2 months
Obstetrical Department	3 months
Pediatrics Department	3 months
Electives	1 month
Unassigned	1 month

Total.....27 mon.hs

SENIOR STUDENTS

Allan, Margaret, Elberton, Ga.
 Bagby, Virginia, *Teachers College*, Johnson City, Tenn.
 Boone, Evelyn, Wilmington, N. C.
 Brake, Thelma, Rocky Mount, N. C.
 Bruffey, Jean, Lynchburg, Va.
 Bryant, Carl, *Greenville Woman's College*, Furman University, Greenville, S. C.
 Clay, Isa, *Montreat Junior College*, Roanoke, Va.
 Cline, Helen, *Lenoir Rhyne College*, Concord, N. C.
 Gandy, Virginia, *Coker College*, Society, S. C.
 Hinshaw, Esther, *Duke University*, Winston-Salem, N. C.
 Jones, Nancy, *Peace Junior College*, Franklin, N. C.
 Makely, Antoinette, *Mitchell College*, Lenoir, N. C.
 Malone, Ernestine, *University of South Carolina*, Columbia, S. C.
 Morison, Polly, Asheville, N. C.
 Painter, Isabelle, *Goucher College*, New Freedom, Pa.
 Parker, Esther, *Greenville Woman's College*, Furman University, Sumter, S. C.
 Paynter, Marcella, Kimberly, W. Va.
 Ray, Dorothy, *Berco Academy*, Nantahala, N. C.
 Wagner, Josephine, *East Tennessee State Teachers College*, Roanoke, Va.
 Weaver, Martha, Weaverville, N. C.
 Weeks, Charlotte, *St. Petersburg Junior College*, St. Petersburg, Fla.
 Wilkinson, Elizabeth, *State Teachers*, Farmville, Virginia, Cumberland, Va.

JUNIOR STUDENTS

Babb, Frances, *Greenville Woman's College*, Furman University, Princeton, S. C.
 Bigler, Ouida, *Grove City College*, Pa., A.B., 1938, Albemarle, N. C.
 Brooke, Inez, *Averette College*, Poindexter, Va.
 Bryant, Edith, *Elon College*, Elon College, N. C.
 Bunch, Mary, *Woman's College of University of N. C.*, Asheville, N. C.
 Collins, Hallie Jo, *Duke University*, Coral Gables, Fla.
 Darrrough, Sara, *Mars Hill College*, Asheville, N. C.
 Deaton, Dorothy, *Flora McDonald College*, Eagle Springs, N. C.
 Dines, Nancy, *Pembroke College*, Hamden, Conn.
 Dugger, Carlotta, *Fairfax Hall Junior College*, Waynesboro, Va.
 Dulin, Margaret, Bowling Green, S. C.
 Hartley, Lucy Dare, *Lees-McRoe College*, Blowing Rock, N. C.
 Horton, Theresa, *Cotawbo College*, Salisbury, N. C.
 Kale, Ella Mae, Asheville, N. C.
 Ledford, Ruby, *Appalachian State Teachers College*, Union Mills, S. C.

McCranie, Aline, *South Georgia College*, Douglas, Ga.
 Mallory, Margaret, Charleston, W. Va.
 Martin, Edrie, *Greensboro College*, Hillsboro, N. C.
 Matheson, Deane, *Woman's College of University of N. C.*, Raeford, N. C.
 Miller, Frances, *State Teachers College*, Boone, N. C.
 Milton, Margaret, *Middle Georgia College*, Adel, Ga.
 O'Neal, Christine, *Winthrop College*, Fairfax, S. C.
 Reinhardt, Cynthia, *Meredith College*, Lincolnton, N. C.
 Schwob, Ann Louise, *Florida State College for Women*, Orlando, Fla.
 Sowers, Lucy, *State Teachers, Harrison, Va.*, Floyd, Va.
 Steigleman, Betty, Harrisburg, Pa.
 Wade, Sarah, *Eastern Carolina Teachers College*, Morehead City, N. C.
 Warren, Sue, *Limestone College*, Durham, N. C.
 Whitener, Marion, *Limestone College*, Shelby, N. C.
 Young, Helen Rose, *Campbell College*, Princeton, N. C.

PRELIMINARY STUDENTS

Alley, Charlotte, *Appalachian State Teachers*, Hickory, N. C.
 Allred, Mary, *Florida State College for Women*, Bowling Green, Fla.
 Ashley, Daisy, Glade Springs, Va.
 Ayers, Mary Elizabeth, *Presbyterian College*, Clinton, S. C.
 Barefoot, Inez, *Florida State College for Women*, Ponce de Leon, Fla.
 Bunn, Esper Nan, *Eastern Carolina Teachers College; Atlantic Christian*,
 Spring Hope, N. C.
 Carter, Myrtle, *Woman's College of University of N. C.*, Gatesville, N. C.
 Clapp, Annie V., Durham, N. C.
 Combs, Thelma Jeanne, Belhaven, N. C.
 Cook, Clara Bert, *Farmville State Teachers*, Franklin, Va.
 Cowan, Frances, *Limestone College*, Westminster, S. C.
 Craft, Betty Jane, Bramwell, W. Va.
 Currie, Helen Gladys, Mayesville, S. C.
 Curtis, Catherine, *Millsaps College*, Clarksdale, Miss.
 Curtis, Mary Anita, Clarksdale, Miss.
 Ellison, Ethel Merle, *University of South Carolina*, Columbia, S. C.
 Estes, Jeane, *Alabama College*, Jasper, Ala.
 Evans, Jane Elizabeth, *Woman's College, Furman University*, Sumter, S. C.
 Fleenor, Christine, *Sullins College*, Bristol, Tenn.
 Gaines, Dorothy Ann, Charlotte, N. C.
 Garris, Evelyn Grace, Raleigh, N. C.
 Geckler, Ruth, *Ohio State University*, Waynesburg, Ohio.
 Gum, Margaret, Durbin, W. Va.
 Hamer, Rhea Fayne, Tatum, S. C.
 Hardin, Hilliard Frances, *Duke University*, A.B., 1939, Clover, S. C.
 Harvin, Harriet Ann, *Anderson Jr. College*, Anderson, S. C.
 Jones, Helen Alison, Bergenfield, N. J.
 Kerr, Maria Ruth, Clinton, N. C.
 Kinsman, Patricia, Morris Plains, N. J.
 Kirkland, Sara, *Woman's College of University of N. C.*, Durham, N. C.
 Krebs, Gladys Luella, Hanover, Pa.
 Lang, Mary Campbell, Norfolk, Va.
 Leatherwood, Elizabeth, *Duke University*, Bryson City, N. C.
 Letherman, Alice, *Mercer University*, Macon, Ga.
 Ligon, Martha, *Madison College*, Clarksville, Va.
 Lingle, Dorothy Lee, Charlotte, N. C.
 McCorkell, Jean Elizabeth, *Farmville State Teachers*, Paulsboro, N. J.
 Maxwell, LaVohn, Jacksonville, Fla.
 Misenheimer, Rachel, *Brevard College*, Taylors, S. C.
 Moore, Louise Harris, *Queens-Chicora College*, Lake City, S. C.
 Moore, Mary Alice, *Madison College*, Clarksville, Va.

Mortimer, Anne, Ashland, Ky.
 O'Brien, Phyllis, St. Petersburg, Fla.
 Poindexter, Kathaleen, *Appalachian State Teachers*, Cana, N. C.
 Poole, Carol, *Woman's College*, *Furman University*, Greenville, S. C.
 Rutledge, Fannie, *Mitchell College*, Leaksville, N. C.
 Sheldon, Dorothy, *Winthrop College*, Fair Play, N. C.
 Slade, Lucy Tabor, *Appalachian State Teachers*, Blanch, N. C.
 Smythe, Florrie, *University of Alabama*, Fort Mill, S. C.
 Stone, June, Bassett, Va.
 Tift, Mary, *Huntingdon College*, Albany, Ga.
 Weintz, Edith, *Duke University*, Austinville, Va.
 Whipple, Isabelle, Jacksonville, Fla.
 Wirt, Emma, *Florida State College for Women*, Babson Park, Fla.
 Wynne, Wilda, *Mars Hill College*, Erwin, Tenn.

AFFILIATE STUDENTS

Gillespie, Mary, Elizabethtown, N. C.
 Gilliam, Elsie, Kingsport, Tenn.
 James, Margaret, *Davenport College*, Cooleemce, N. C.
 Johnson, Cassie, Murphy, N. C.
 Keeler, Louise, *Wesleyan Methodist College*; *Anderson College*, Central, S. C.
 Lovett, Hazel, Sardis, Ga.
 Moore, Mary Agnes, Climax, Ga.

DUKE UNIVERSITY SCHOOL OF NURSING GRADUATES

Adams, Dorothy Ellen. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
 Adams, Maude (Mrs. Percy White). Diploma, 1938; B.S., 1939. Lynnhaven, Va.
 Alexander, Ruth Brinkley. Diploma, 1939; General Duty, Duke Hospital.
 Applewhite, Ida Shaw. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital. Halifax, N. C.
 Arnold, Aldine. Diploma, 1933; Head Nurse, Garfield Hospital, Washington, D. C.
 Atinson, Pauline (Mrs. J. A. Martin). Diploma, 1937; Head Nurse, Duke Hospital.
 Atzrodt, Rebecca Anne (Mrs. Warner Wells). Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
 Barbee, Sula (Mrs. Geo. R. Parks). Diploma, 1938. 1104 Ninth St., Durham, N. C.
 Barton, Ruth Lorelle. Diploma, 1939; B.S., 1939; Assistant Practical Nursing Instructor, Duke Hospital.
 Beery, Anne. Diploma, 1938; General Duty, Duke Hospital.
 Bell, Joyce (Mrs. Guy Hager). Diploma, 1937. 821 Pearl St., Sharon, Pa.
 Bisanar, Lelia Elizabeth. Diploma, 1939; General Duty, Duke Hospital.
 Black, Frances. Diploma, 1937; Operating Room Nurse, Duke Hospital.
 Blakely, Margie Dean. Diploma, 1937; Private Duty. 10 Aycock Apt., Durham, N. C.
 Boone, Nellie. Diploma, 1936; Head Nurse, Emergency Hospital, Washington, D. C.
 Bradshaw, Julia. Diploma, 1934; Head Nurse, Duke Hospital. 820 Wil .erson Ave., Durham, N. C.
 Brewer, Lottie Mae. Diploma, 1934; B.S., 1939; Clinic Nurse, Duke Hospital.
 Brinkley, Gladys (Mrs. J. F. Stuckey). Diploma, 1933. 1911 Sunset Drive, Raleigh, N. C.
 Brooks, Ida Florence. Diploma, 1937; Operating Room Nurse, Duke Hospital.
 Bryant, Hazel. Diploma, 1937; Public Health, Lumberton, N. C.
 Cadle, Evelyn. Diploma, 1937; B.S., 1938; General Duty, Duke Hospital.

- Caldwell, Faire. Diploma, 1934; Private Duty. Matthews, N. C.
- Camp, Delores (Mrs. J. L. Atkins, Jr.). Diploma, 1935; Private Duty. 1407 Dollar Ave., Durham, N. C.
- Carson, Bonnie. Diploma, 1934; Private Duty. 11 Vance Apt., Durham, N. C.
- Carter, Mary Irvine (Mrs. C. H. Gay). Diploma, 1936. 500 Queen Rd., Charlotte, N. C.
- Castleberry, Margaret. Diploma, 1939; Assistant Instructor and Clinic Nurse, Duke Hospital.
- Cates, Ona Maude. Diploma, 1936; General Duty, Duke Hospital.
- Chittenden, Eleanor (Mrs. E. E. Menefee). Diploma, 1935. Macy's Dept. Store, New York, N. Y.
- Clapp, Elizabeth. A.B. from W. C. U. N. C., 1930; Diploma, 1935; B.S., 1937; Instructor in Nursing Practice, Norwalk General Hospital, Norwalk, Conn.
- Cobb, Zula. Diploma, 1934; Private Duty. 11 Vance Apt., Durham, N. C.
- Cook, Betty Wood. Diploma, 1939; B.S., 1939. Franklin, Va.
- Cook, Maude. Diploma, 1938; General Duty, Norwalk General Hospital, Norwalk, Conn.
- Corbett, Mary Elizabeth (Mrs. R. W. Postlethwaite). Diploma, 1936. 838 Lathrop Ave., Detroit, Mich.
- Cothran, Mary Lillie. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
- Cotter, Ethel. Diploma, 1933; Operating Room Supervisor, Park View Hospital, Rocky Mount, N. C.
- Cranford, Kathryn. Diploma, 1934; Floor Supervisor, Orthopaedic Hospital, Gastonia, N. C.
- Crowell, Alucia. Diploma, 1939; General Duty, Duke Hospital.
- Crutchfield, Ruth (Mrs. W. P. Fields). Diploma, 1939. 149 New York Ave., Brooklyn, N. Y.
- Currence, Martha. Diploma, 1938; Private Duty. 9 Vance Apt., Durham, N. C.
- Davey, Margaret (Mrs. J. T. Barbee). Diploma, 1935. 407 Alterview Ave., Roanoke, Va.
- Decker, Edna. Diploma, 1938; B.S., 1938; Assistant Superintendent of Nurses, North Hudson Hospital, Weehawken, N. J.
- Dobbin, Louise. Diploma, 1934; Private Duty. 11 Vance Apt., Durham, N. C.
- Dunn, Dorothy. Diploma, 1938; B.S., 1938; Science Instructor, North Hudson Hospital, Weehawken, N. J.
- Eagles, Kathleen. A.B., Atlantic Christian College, 1935; Diploma, 1938; B.S., 1938; Night Supervisor, Pitt General Hospital, Greenville, N. C.
- Estes, Frances (Mrs. Robert Regan). Diploma, 1937; B.S., 1938. 726 Napier Ave., Macon, Ga.
- Evans, Elizabeth. Diploma, 1933; Operating Room Nurse, Duke Hospital.
- Feagans, Hilda. Diploma, 1935; General Duty, Veterans Hospital, Roanoke, Va.
- Forrest, Margaret (Mrs. Ross Porter). Diploma, 1935. Hillsboro, N. C.
- Fox, June (Mrs. Harold Schiro). Diploma, 1935. 3222 Burnett Ave., Cincinnati, Ohio.
- Gambill, Ruth (Mrs. Ben Miller). Diploma, 1936. 2209 Wheat St., Columbia, S. C.
- Gangle, Elsie S. Diploma, 1939; General Duty, Duke Hospital.
- Gibson, Jean. Diploma, 1938; General Duty, Duke Hospital.
- Gilliam, Hazel. Diploma, 1937; Operating Room Nurse, Duke Hospital.
- Gladstone, Annie Laurie (Mrs. C. S. Tilley, Jr.). Diploma, 1937; Operating Room Nurse, Duke Hospital.
- Goodman, Eunice. Diploma, 1934; Public Health, Raleigh, N. C.
- Gordon, Nellie Elizabeth. Diploma, 1939; General Duty, Duke Hospital.
- Green, Mary (Mrs. D. W. Lester). Diploma, 1933. Reidsville, N. C.
- Gurley, Louise (Mrs. W. W. Sutton). Diploma, 1934; Private Duty. 820 Wilkerson Ave., Durham, N. C.
- Hall, Myra. A.B. West Virginia Univ., 1934; Diploma, 1938; B.S., 1938; Science Instructor, Bayonne Hospital and Dispensary, Bayonne, N. J.

- Hampton, Julia. Diploma, 1937; Missionary Work, Belgian Congo.
- Hawfield, Annie Jo. Diploma, 1933; Public Health Nurse, Durham, N. C.
- Herman, Margaret. Diploma, 1934; A.B. at Lenoir Rhyne, 1931; B.S., 1938; Head Nurse, Duke Hospital.
- Herman, Mary Alice (Mrs. H. V. Parks). Diploma, 1934; B.S., 1938. Chamberlain St., Raleigh, N. C.
- High, Christine. Diploma, 1938; Public Health, Williamston, N. C.
- Hines, Margaret L. Diploma, 1934; Public Health Supervisor, Chapel Hill, N. C.
- Hodges, Charlotte (Mrs. Dan Jones). Diploma, 1937; B.S., 1938. Reidsville, N. C.
- Holleman, Matilda (Mrs. Vince Moseley). A.B., Duke University, 1930; Diploma, 1934; B.S., 1936; Instructor in Principles and Practice of Nursing; Duke Hospital. University Apts., Durham, N. C.
- Holley, Mildred. Diploma, 1937; Private Duty. 10 Aycock Apt., Durham, N. C.
- Hollowell, Maude. Diploma, 1935; B.S., 1939; General Duty, Nurses' Cottage No. 1, Veterans' Administration Facility, Dayton, Ohio.
- Humphrey, Frankie (Mrs. J. H. Rainey). Diploma, 1935; B.S., 1937. Walterboro, S. C.
- Hunter, Frances. Diploma, 1936; Public Health, Marlinton, W. Va.
- Jarrett, Sara. Diploma, 1938; B.S., 1938; Supervisor, Norwalk General Hospital, Norwalk, Conn.
- Johnson, Gretchen (Mrs. Clyde Cheek). Diploma, 1934; Private Duty. 1911 Yearby Ave., Durham, N. C.
- Johnson, Josephine. Diploma, 1935; B.S., 1938; Operating Room Nurse, Duke Hospital.
- King, Emily (Mrs. Robert Bailey). Diploma, 1936; County Health Department, Lenoir, N. C.
- Klein, Frances Maie (Mrs. F. Henderson). Diploma, 1934; Head Nurse, Duke Hospital.
- Kuykendal, Margaret. Diploma, 1934; B.S., 1938; Evening Supervisor, Duke Hospital.
- Lineberger, Mary Louise. Diploma, 1937; Operating Room, Duke Hospital.
- Lopp, Lucille. Diploma, 1937; B.S., 1938; Clinic Nurse, Duke Hospital.
- McAdams, Marie. Diploma, 1937; Operating Room Nurse, Duke Hospital.
- McBane, Gladys (Mrs. J. S. Denholm). Diploma, 1934. Burlington, N. C.
- McCain, Mary Alice (Mrs. Frank Bordoff). Diploma, 1936. 2917 Bratton St., Columbia, S. C.
- McDavid, Virginia. Diploma, 1937; B.S., 1938; Nursing Instructor, Druid City Hospital, Tuscaloosa, Ala.
- McLaughlin, Louise. Diploma, 1935; B.S., 1939; Private Duty. 10 Aycock Apt., Durham, N. C.
- Mann, Elizabeth. Diploma, 1933; Nursing Instructor, City Hospital, Martinsburg, W. Va.
- Marr, Leta Mae. A.B., Duke University, 1931; Diploma, 1937; B.S., 1937; Assistant Practical Nursing Instructor, Vanderbilt University, Nashville, Tenn.
- Massenburg, Sue. Diploma, 1935; General Duty, Duke Hospital.
- Maxwell, Winifred Lance. Diploma, 1939; B.S., 1939; Clinic Nurse, Duke Hospital.
- Miller, Eleanor. Diploma, 1934; General Duty. 130 Kingsbridge Rd., Veterans Hospital, Bronx, N. Y.
- Miller, Margaret Carolyn. Diploma, 1939; General Duty, Duke Hospital.
- Moore, Elizabeth. Diploma, 1934; B.S., 1938; Private Duty. 111 Broadus Ave., Greenville, S. C.
- Moore, Margaret (Mrs. Roderick Jones). Diploma, 1936; B.S., 1937. Burnsville, N. C.
- Morrison, Lavenia. Diploma, 1935; Industrial Nurse. 142 W. Franklin St., Boundbrook, N. J.

- Norton, Anne (Mrs. Robert L. Chambers). Diploma, 1933. 2633 Chapel Hill Rd., Durham, N. C.
- Olsen, Lurline. Diploma, 1938; B.S., 1938; Private Duty. 9 Vance Apt., Durham, N. C.
- Parker, Ida (Mrs. L. B. Council). Diploma, 1935. Oakville, Tenn.
- Parks, Virda (Mrs. Jim Marshall). Diploma, 1936; Private Duty. Winston-Salem, N. C.
- Parrish, Marcelle. Diploma, 1939; B.S., 1939; Operating Room Work, Duke Hospital.
- Peele, Margaret. A.B., Greensboro College, 1932; Diploma, 1937; B.S., 1937; Evening Supervisor, Duke Hospital.
- Pegram, Annie Lee. Diploma, 1938; Private Duty. 9 Vance Apt., Durham, N. C.
- Perry, Mary. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
- Pickett, Margaret Carpenter. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
- Pope, Virginia. Diploma, 1938; B.S., 1938; Private Duty. 706 Buchanan Blvd., Durham, N. C.
- Rabb, Sara Iris (Mrs. John Baughman). Diploma, 1939. Moreland, Ky.
- Rearden, Laureen Harris. Diploma, 1939; Clinic Nurse, Duke Hospital.
- Richards, Dorothy Eugenia. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
- Sanford, Marian Blinn. Diploma, 1939; General Duty, Duke Hospital.
- Seawell, Margaret Hines. Diploma, 1939; General Duty, Duke Hospital.
- Sharp, Annie Hill (Mrs. Fred Klenner). Diploma, 1934; B.S., 1937; Medical Supervisor, Duke Hospital.
- Sheddy, Maxine (Mrs. Jack Bennett). Diploma, 1935. 3329 N. 15th St., Philadelphia, Pa.
- Shields, Lois Natalie. Diploma, 1939; B.S., 1939; General Duty, Duke Hospital.
- Smith, Hilda. Diploma, 1938; Private Duty. 706 Buchanan Blvd., Durham, N. C.
- Strother, Elizabeth. Diploma, 1936; Cottage No. 2, Veterans' Administration Facility, Dayton, Ohio.
- Sugg, Norma. Diploma, 1934; Anesthetist, Bryn Mawr Hospital, Bryn Mawr, Pa.
- Thomas, Vera. Diploma, 1935; Head Nurse, Duke Hospital.
- Thompson, Elizabeth (Mrs. George Pope). Diploma, 1936; Clinic Nurse, Duke Hospital.
- Thrower, Emma (Mrs. Vincent Doolittle). Diploma, 1933. Rockingham, N. C.
- Tillett, Grace (Mrs. John Wiggins). Diploma, 1933; B.S., 1938. 2631 Chapel Hill Rd., Durham, N. C.
- Umbel, Waneta. B.S., West Virginia Univ., 1935; Diploma, 1938; B.S., 1938; Night Supervisor, Norwalk General Hospital, Norwalk, Conn.
- Ward, Jessie (Mrs. L. C. Roberts). Diploma, 1933; B.S., 1938; Clinic Nurse, Duke Hospital.
- Ware, Frances. Diploma, 1934; B.S., 1939; Public Health Nurse; Halifax County Health Dept., Weldon, N. C.
- Wehunt, Rosabelle. Diploma, 1936; Head Nurse, Duke Hospital.
- Whitley, Maurine (Mrs. George Udhe). Diploma, 1934; General Duty, Johns Hopkins Hospital, Baltimore, Md.
- Wilkinson, Dorothy. Diploma, 1936; Private Duty. 11 Vance Apt., Durham, N. C.
- Williams, Mary. Diploma, 1936; Night Supervisor, Sternberger Hospital, Greensboro, N. C.
- Wilson, Helen. Diploma, 1933; Public Health Nurse, Lumberton, N. C.
- Wilson, Sarah (Mrs. William Eckbert). Diploma, 1938. 2912 Dunnmurray Rd., Apt. D, Dundark Community, Baltimore, Md.
- Wooten, Julia. Diploma, 1937; Clinic Nurse. Univ. Apts., L-3-C, Durham, N. C.

Yarbrough, Pearl. Diploma, 1933; Private Duty. Box 1112, Durham, N. C.
 Yates, Virginia (Mrs. C. W. Camalier, Jr.). Diploma, 1936; General Duty,
 Sibley Memorial Hospital, Washington, D. C.
 Zirkle, Margaret (Mrs. Herbert Collier). Diploma, 1936. 3319 Woodrow Ave.,
 Richmond, Va.

GEOGRAPHICAL DISTRIBUTION

Delaware	1
District of Columbia	1
Florida	5
Georgia	4
Montana	1
New Jersey	1
North Carolina	81
Pennsylvania	4
South Carolina	14
Virginia	12
West Virginia	6
<i>Total</i>	<hr/> 130

INDEX

Activities offered	12	Health Regulations and Physical Education	12
Administration, Officers of	5	Henderson, Frances M. Klein.....	9
Admission Requirements	12, 13	Herman, Margaret Rebecca	9
Affiliate Students	20	Hinves, Edith	7
Allergy	16	History of Nursing	15
Alyea, Edwin Pascal	9, 16	Hughes, Ann M.	7
Anatomy	15	Information, General	11
Anderson, William Banks	10, 16	Instruction, Facilities for	11
Arena, J. Morris.....	10	Irvine, Jane	7, 16
Assistant Supervisors and Head Nurses	8	James, Ruhý	7
Autumn Quarter	16, 17	Johnston, Christopher	16
First Year	16	Junior Students	18, 19
Second Year	17	Klenner, A. S.....	7, 15, 16
Third Year	17	Kohn, Henry Irving	10, 15
Bacteriology	15	Kuykendal, Margaret	8
Baker, Bessie	6	Laxton, Augusta	8
Baker, Lenox Dial	10, 16	Libraries	11
Basal Metabolism	16	Loy, Credith	8
Batchelder, Marion Frances.....	7, 16	Lundholm, Helge	9, 15
Bradshaw, Julia Jane.....	9	Lyon, Nolie H.	9
Bradway, J.	15	McBryde, Angus Murdoch.....	10, 16
Brown, Harold	10, 16	Markham, Charles Blackwell.....	5
Burnham, Hilda	8	Martin, Donald S.	10, 15
Calendar	4	Martin, Elsie Wilson	15
Callaway, Jasper Lamar.....	10, 16	Martin, G. Pauline	9
Carter, Bayard	9, 16	Materia Medica	15
Chemistry	15	Mathews, Mrs. M. M.....	10
Clinical Experience after First Six Months	18	Medical Diseases and Medical Nursing	15
Communicable Diseases	16	Moseley, Matilda E. Hollemann.....	6, 15
Community Health, Introduction to...	15	Neurology and Psychiatry	16
Courses of Instruction, Description of the	15	Nursing Arts	15
Crispell, Raymond S.....	10, 16	Nursing, History of	15
Curriculum	16	Nutrition	15
Davis, Madeline Mabel.....	8	Obstetrics	16
Dental Hygiene	16	Officers of Administration	5
Dermatology	16	Operating Room Technique	16
Description of the Courses of Instruction	15	Ophthalmology	16
Dietetic Therapy	15	Orthopedics	16
Duke University School of Nursing Graduates	20	Otology, Rhinology, and Laryngology...	16
Eagle, Watt Weems	10, 16	Pathology	15
Epperson, J. H.	10, 15	Pediatrics	16
Expenses	13	Peele, Margaret	8
Facilities for Instruction	11	Physical Education	12
Facilities of the Hospital.....	11	Physiology	15
Faculty of the School of Nursing.....	6	Physical Therapy	16
Few, William Preston	5	Pinkerton, Margaret	5, 6, 15
Flowers, Robert Lee	5	Posture	16
First Year	16	Preliminary Students	19, 20
Autumn Quarter	16	Preventive Medicine and Public Health	15
Spring Quarter	17	Professional Adjustments	15
Summer Quarter	17	Psychiatry	16
Winter Quarter	16	Psychology	15
Gardiner, Ann Henshaw.....	6, 15, 16	Public Health	15
General Information	11	Raney, Richard Beverly	9, 16
Gibson, Perry	15	Readmission	14
Gordon, Mahel Page	10, 16	Reber, A.	10
Graduates, Duke University School of Nursing	20	Reeves, Robert James	10, 16
Gynecology	16	Regional Representatives	11
Hansen-Prüss, Oscar C. E.....	16	Requirements	12, 13
Harris, Jerome Sylvan	10, 16	Residence	12
Head Nurses	8	Riddle, Mildred Carter	8
Health, Introduction to Community....	15		

School of Nursing, Faculty of the.....	6	Taylor, Haywood Maurice	9, 15
School of Nursing, The.....	11	Third Year	17
School of Nursing and Hospital Calendar	4	Autumn Quarter	17
Schulze, W.	10, 15	Spring Quarter	17
Second Year	17	Summer Quarter	17
Autumn Quarter	17	Winter Quarter	17
Spring Quarter	17	Thomas, Vera Virginia	9
Summer Quarter	17	Upchurch, S. E.	10
Winter Quarter	17	Urology	16
Senior Demonstrations	15	Vacations	14
Senior Students	18	Wannamaker, William Hane	5
Sherwood, Mildred	7, 16	Wehunt, Rosahelle	9
Social Service	15	White, Julia Elizabeth	6
Sociology	15	Williams, Mary C.	8
Spring Quarter	17	Winter Quarter	17
First Year	17	First Year	17
Second Year	17	Second Year	17
Third Year	17	Third Year	17
Sprunt, Douglas Hamilton	10, 15	Wolford, Vida M.	8
Students	18, 19, 20	X ray	16
Summer Quarter	17	Youngstrom, Karl Arden	10, 15
First Year	17		
Second Year	17		
Third Year	17		
Surgical Diseases and Surgical Nursing	16		

VOLUME 12

January, 1940

NUMBER 3

BULLETIN OF DUKE UNIVERSITY

The School of Forestry

1940



PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL CATALOGUES AND BULLETINS

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

FOR BULLETIN OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY
THE SCHOOL OF FORESTRY



ANNOUNCEMENTS FOR 1940-1941

DURHAM, NORTH CAROLINA
1940

CONTENTS

	PAGE
SCHOOL OF FORESTRY CALENDAR.....	5
OFFICERS OF ADMINISTRATION.....	7
FACULTY OF THE SCHOOL OF FORESTRY.....	8
DUKE FOREST STAFF.....	8
FORESTRY IN DUKE UNIVERSITY: General Statement.....	9
Educational Facilities.....	10
The Duke Forest.....	11
The Arboretum.....	13
SCHOLARSHIPS AND FELLOWSHIPS IN FORESTRY.....	14
REQUIREMENTS FOR ADMISSION TO THE SCHOOL OF FORESTRY.....	15
REQUIREMENTS FOR THE DEGREE OF MASTER OF FORESTRY.....	16
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF FORESTRY.....	17
FORESTRY IN THE GRADUATE SCHOOL.....	21
COURSES AND SUBJECTS OF INSTRUCTION.....	23
FEES AND EXPENSES.....	28
ENROLLMENT, 1939-40.....	31

SCHOOL OF FORESTRY CALENDAR

1940

- May 31. Friday—Field work begins in Surveying (C. E. S110) required of students entering School of Forestry.
- June 21. Friday—Field work begins in Forest Surveying (For. S150).
- July 4. Thursday—Independence Day: a holiday.
- July 26. Friday—Field work begins in Forest Mensuration (For. S151).
- Sept. 17. Tuesday—Student conferences with School of Forestry Faculty.
- Sept. 18. Wednesday—Registration of students in the School of Forestry.
- Sept. 19. Thursday—Instruction begins in the School of Forestry.
- Sept. 19-21. Thursday, Friday, Saturday—Registration of students in the Graduate School.
- Oct. 15. Tuesday—Last day for submitting thesis subjects for Master of Forestry and Doctor of Forestry degrees.
- Nov. 28. Thursday—Thanksgiving Day: a holiday.
- Dec. 11. Wednesday—Duke University Day.
- Dec. 20. Friday, 1:00 P.M.—Christmas recess begins.

1941

- Jan. 3. Friday, 8:00 A.M.—Instruction is resumed.
- Jan. 24. Friday—School of Forestry mid-year examinations begin.
- Jan. 31. Friday—Registration of students in the School of Forestry.
- Feb. 1. Saturday—Second semester begins.
- March 22. Saturday, 1:00 P.M.—Spring vacation begins. School of Forestry field trip begins.
- March 31. Monday, 8:00 A.M.—Instruction is resumed.
- April 7. Monday, 8:00 A.M.—School of Forestry field trip ends.
- May 1. Thursday—Last day for submitting Doctor of Forestry theses.
- May 15. Thursday—Last day for submitting Master of Forestry theses.
- May 22. Thursday—School of Forestry final examinations begin.

- May 31. Saturday—Commencement opens; Senior Class Day; meeting of the Board of Trustees.
- June 1. Sunday—President's Address to Graduating Class; Commencement Sermon.
- June 2. Monday—Commencement Address; Alumni-Alumnae Luncheon; Graduating Exercises; Lowering of the Flag by the Graduating Class.

OFFICERS OF ADMINISTRATION

FEW, WILLIAM PRESTON, A.B., A.M., Ph.D., Litt.D., LL.D. <i>President</i>	West Campus
FLOWERS, ROBERT LEE, A.M., LL.D. <i>Vice-President in the Business Division, Secretary, and Treasurer</i>	West Campus
WANNAMAKER, WILLIAM HANE, A.B., A.M., Litt.D. <i>Vice-President in the Educational Division and Dean of the University</i>	West Campus
BROWN, FRANK CLYDE, A.B., A.M., Ph.D. <i>Comptroller</i>	410 Buchanan Boulevard
MARKHAM, CHARLES BLACKWELL, A.B., A.M. <i>Assistant Treasurer</i>	204 Dillard Street
KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Dean of the School of Forestry</i>	1718 Duke University Road

ADMINISTRATIVE COMMITTEE OF THE SCHOOL OF FORESTRY

W. P. FEW, *President*
R. L. FLOWERS, *Secretary and Treasurer*
C. F. KORSTIAN, *Dean*

COMMITTEE OF THE BOARD OF TRUSTEES ON THE SCHOOL OF FORESTRY

H. R. DWIRE, W. W. FLOWERS, M. E. NEWSOM

FACULTY OF THE SCHOOL OF FORESTRY

BEAL, JAMES ALLEN, B.S., M.S., Ph.D. <i>Professor of Forest Entomology</i>	908 West Markham Avenue
COILE, THEODORE STANLEY, B.S.F., M.F., Ph.D. <i>Assistant Professor of Forest Soils</i>	University Apts., D-3-C
HARRAR, ELLWOOD SCOTT, B.S., M.S., Ph.D. <i>Associate Professor of Wood Technology</i>	1402 Alabama Avenue
KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Professor of Silviculture</i>	1718 Duke University Road
KRAMER, PAUL JACKSON, A.B., M.Sc., Ph.D. <i>Associate Professor of Botany</i>	922 Urban Avenue
MAUGHAN, WILLIAM, B.S., M.F. <i>Associate Professor of Forest Management</i>	5 Sylvan Road
SCHUMACHER, FRANCIS XAVIER, B.S. <i>Professor of Forestry</i>	6 Sylvan Road
THOMSON, ROY BERTRAND, B.S., M.F., Ph.D. <i>Associate Professor of Forest Economics</i>	University Apts., K-1-A
WACKERMAN, ALBERT EDWARD, B.S., M.F. <i>Professor of Forest Utilization</i>	110 Forest Wood Drive
WOLF, FREDERICK ADOLPHUS, A.B., A.M., Ph.D. <i>Professor of Botany</i>	924 Urban Avenue

DUKE FOREST STAFF

KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Director</i>	1718 Duke University Road
MAUGHAN, WILLIAM, B.S., M.F. <i>Assistant Director</i>	5 Sylvan Road
BLACKMON, MANLY RANKIN <i>Superintendent</i>	2321 Erwin Road
HAINES, HARRY CAUM, B.S.F., M.F. <i>Forest Assistant</i>	116 Buchanan Boulevard
CLAPP, WREATH <i>Bookkeeper</i>	219 Dacian Avenue

DUKE ARBORETUM

HARRAR, ELLWOOD SCOTT, B.S., M.S., Ph.D. <i>In Charge</i>	1402 Alabama Avenue
--	---------------------

ASSISTANTS IN SCHOOL ADMINISTRATION

RHODES, MRS. MARGARET <i>Recorder and Secretary to the Dean</i>	715 Vickers Avenue
PARKER, LUCILLE, A.B. <i>Statistical Clerk</i>	103 Erwin Apartments
BURKE, MRS. VERA K. <i>Clerk</i>	836 Mangum Street
CARROW, MRS. FRANCES <i>Clerk</i>	1811½ Pettigrew Street

FORESTRY IN DUKE UNIVERSITY

GENERAL STATEMENT

Duke University, located at Durham, North Carolina, comprises Trinity College, the Woman's College, the College of Engineering, the Graduate School of Arts and Sciences, and the professional schools of Forestry, Law, Medicine, Nursing, and Religion. Nearly every state of the Union and several nations are represented in the student body of more than thirty-four hundred, not including the enrollment in the Summer School.

The University goes back in its origin to 1838, when Union Institute was founded in Randolph County by the Methodists and Friends. In 1851 the institution became Normal College, and was one of the first schools in America for the training of teachers. In 1859 the name was changed to Trinity College and so continued until 1924, when the College became a part of Duke University.

By virtue of an indenture of trust, executed December 11, 1924, by James Buchanan Duke, a great benefaction was placed at the disposal of humanity by providing for hospitalization, church work in rural communities, and education. The principal feature of the educational provision was the creation of Duke University.

The University occupies two campuses. The Woman's College campus, with its 108 acres, was formerly the campus of Trinity College. About a mile to the west are the new units of the University. The new campus, totaling 467 acres, also known as the West Campus, was first occupied in September, 1930.

Forestry in Duke University began early in 1931 when, through placing the Duke Forest under intensive management for forestry purposes, a substantial beginning was made in laying the foundations for educational work and research in forestry.

A pre-forestry curriculum, designed for students intent upon pursuing the study of forestry, particularly as a profession after graduation, was organized in Trinity College of Duke University in 1932 (see *Announcement on Undergraduate Instruction in Duke University*). This four-year course of study provides only for instruction in fundamental and auxiliary subjects basic to a proper understanding of the highly specialized work in technical forestry. Duke University offers no professional degree in technical forestry available to undergraduates.

Training in technical forestry leading to the professional degrees, Master of Forestry and Doctor of Forestry, is offered in the School of Forestry, and is open to all graduates of the pre-forestry curriculum in Trinity College and to graduates of recognized scientific schools or colleges, universities, and professional schools of forestry.

Duke University is also prepared to offer, through the Graduate School of Arts and Sciences, graduate work in the more scientific aspects

of forestry leading to the Master of Arts and Doctor of Philosophy degrees. This work is available to graduates of schools of forestry of recognized standing, and to college or university graduates holding the Bachelor's degree with their major work in appropriate scientific subjects. Undergraduate subjects which the college student, who does not have forestry training but who is contemplating work toward either degree in forestry, should take in preparation for this work may be illustrated as follows: at least two full years in botany, including general morphology or anatomy, the taxonomy, physiology, and ecology of plants; at least one course in zoology or general biology; courses in chemistry, physics, geology, economics, mathematics; and at least two years of French or German.

Several staff members of the Appalachian Forest Experiment Station are engaged in co-operative research projects in the Duke Forest. Specialists from this station and other prominent members of the U. S. Forest Service and representatives of forest and wood-using industries give occasional scheduled lectures at the School.

EDUCATIONAL FACILITIES

The School of Forestry is located partly in Few Quadrangle and partly in the Biology Building along with the Departments of Botany and Zoology. The administrative offices, two classrooms, and the forest mensuration and statistical laboratory are in Few Quadrangle, while other laboratories and offices and the School Library are in the Biology Building. The Biology Building contains, in addition to classrooms, laboratories, and offices, a library, three refrigerated rooms, an incineration room, a workshop, and eight dark-rooms. The School is provided with instruments and tools for use in both field and laboratory work in silvics, silviculture, and forest mensuration. Modern surveying instruments and accessory equipment are available for work in forest surveying.

Laboratories for work in wood anatomy and properties are provided with microtechnique and photomicrographic instruments, wood-working machinery, a Henderson dry kiln, and a 50,000-pound Olsen Universal timber-testing machine. A modern forest soils laboratory equipped for physical and chemical studies is available.

Facilities are also available for advanced work in plant physiology, plant anatomy, plant taxonomy, genetics, plant ecology, plant pathology, and the several branches of zoology. Many rooms in the Biology Building are equipped with vacuum, compressed air, direct and alternating electric current, gas, and running water.

The forestry section of the Library contains a growing collection of material on forestry, soils, and closely related subjects. It includes important books and periodicals in English and in French, German, and certain other foreign languages. The Library is well provided with American material, including Federal and State documents and reports. Over 150 periodicals and serials of importance in forestry and related fields are received by subscription or exchange.

Greenhouses, connected to the Biology Building through a soil-storage and work room, provide adequate space for experimental work.

A nursery has been established by the University for the joint use of the Sarah P. Duke Floral Garden, the Botany Department, and the School of Forestry. The forestry section of this nursery is used mainly for the growing of planting stock for the Arboretum and trees needed for research or other special purposes.

THE DUKE FOREST

The Duke Forest, located in Durham and Orange counties, North Carolina, consists of three main units; namely, the Durham, New Hope Creek, and Hillsboro divisions. Early in the development of Duke University it was recognized that the possession of such an area offered an unusual opportunity for the development of educational work in forestry.

Situated on the lower Piedmont plateau at elevations ranging from 280 to 650 feet, and composed of second-growth shortleaf and loblolly pines, oak, gum, hickory, maple, yellow poplar, ash, and other hardwoods, the Forest is representative of the various types of timber growth found throughout the region. Over a hundred different species of trees are found within or near the Forest. The land is rolling and there is relatively little rock outcrop, swamp, or other land of low productivity for timber growing. The total area of the Forest proper, exclusive of the University campus, is approximately five thousand acres.

In developing the Duke Forest the following objectives are being emphasized:

1. Demonstration of the various methods of timber growing, silvicultural treatment, and forest management applicable to the region.

2. Development as an experimental forest for research in the problems of timber growing and in the sciences basic thereto. In spite of the present timber situation and the accompanying economic ills, the technical and scientific knowledge required to handle forest crops efficiently on a permanent basis is still largely lacking. The Duke Forest affords a place where investigations may be carried on to augment this knowledge for the large region of which the local forest and soil conditions are representative.

3. To serve as an outdoor laboratory where field work can be carried on by forestry students under the guidance of the Forestry Faculty. One of the most difficult problems in forestry education is to bring the students into contact with the realities of professional activities. With all operations in the Forest, both routine and investigative, recorded annually, it is possible for a qualified man to get in a short time a degree of practical knowledge or technical expertness which only an organized forest can provide.

The Duke Forest is particularly well located to serve as a field laboratory, in that most of it is adjacent and easily accessible to the University campus. In fact, the Durham Division practically surrounds the West Campus, since it was laid out in one corner of the Forest. A paved

State highway runs lengthwise through the Durham Division, and several good roads cross the Forest. About fifteen miles of improved woods roads make all parts of the Forest readily accessible. A five-minute walk will take one well into the Forest, and any part of the Durham or New Hope Creek divisions can be reached by automobile in from ten to twenty minutes. At few other places in America can be found provision for forestry training and research which include the necessary forest literally at the door of a large university with its instructional, laboratory, and library facilities.

Although the Forest has been but recently organized, considerable progress has been made toward carrying out the principal objectives recognized at the outset.

Most of the 1,286 acres of open land is, or until recently has been, cultivated. Such of the open land as is not restocking naturally to forest trees is being planted. Here students have an opportunity to study at first hand the results of many experimental plantations prepared for them in advance. Arbitrarily by mixing species and varying the spacing between the trees in the plantations now being made, the foundation is laid for future research into many perplexing problems, such as species relationships and requirements, the most desirable spacing and species to use in this region, and the survival and relative rates of growth of the different species of trees.

Over sixty permanent sample plots, ranging in size from one-tenth acre to one acre, have been laid out in the Forest to study various problems. The plots are distributed through all the forest types, and range in purpose from studies of the effects of various silvicultural practices to studies of rates of growth and yields of the different timber types. More plots are being established as rapidly as time and funds will permit. Accurate records are kept on all this work, which will provide excellent material for student research. In the future many of these plots can also be used to demonstrate desirable forestry practices.

The work of putting the Forest under intensive management is well under way. A complete inventory of the Forest has been made, and tabulations showing the present volume and annual growth of each separate timber stand are at hand. A forest type and timber stand map for each of the three divisions has also been completed. Each division has been subdivided into permanent compartments, and recommendations for the silvicultural treatment of the separate stands in each compartment, to be embodied in a management plan, are being formulated. Cutting operations within the limits of annual growth are being carried on, and as markets for definite products are developed or expanded such operations will be increased. To date, approximately 635 acres in the pine types have been thinned. These thinnings serve the dual purpose of contributing to the operation of the Forest as a going business and of demonstrating sound forestry practices. An efficient fire protection organization has been developed in co-operation with the State and Federal governments, and forest fire losses are being held to a minimum. In managing the

Forest, public recreation activities are recognized. Several recreation areas have been established, and over fifteen thousand picnickers, hikers, and horseback riders use the area annually. The Durham and New Hope Creek divisions of the Forest, together with several hundred acres of neighboring privately owned land, are incorporated in an Auxiliary State Game Refuge to give the necessary protection which will ultimately result in an increased amount of game in the surrounding territory. Records are being maintained of all activities in the Forest, and these records will become increasingly useful as they are improved as a result of further experience and research. With the diversification and expansion of activities now going on, the student has an opportunity to study an operating forest in all its phases and to obtain a grasp of the proper balance between theory and practice.

The Forest is admirably located for research in forest soils. An unusually large number of different soil conditions occur in the Forest because of the diversity of parent rock, topography, and past land culture. Major soil differences are due to the nature of the parent material which includes the basic rock of the Carolina Slate formation, granites, Triassic sedimentary rock, and many types of basic intrusives.

An exceptionally good opportunity exists for the conduct of forest research by graduate students due to the wide range in forest types, ages, and soil conditions within the Forest and its proximity to the laboratories, greenhouses, and other scientific equipment and library facilities of the University. Research has already been started on special problems, particularly in the fields of silvics, forest soils, forest-tree physiology, silviculture, forest management, and wood technology. The Forest is used not only for research in forestry but also for research in forest biology by members of allied departments.

THE ARBORETUM

A feature which will be of outstanding value in the teaching of both forestry and botany in the future is the provision for development of an arboretum. In their annual meeting on June 4, 1934, the Board of Trustees of Duke University, upon the recommendation of their Forestry Committee, voted to set aside permanently an area of over three hundred acres in the Forest to be used for arboretum purposes. The area lies adjacent to the main University campus immediately across the road from the Chapel.

Through the generosity of Mr. W. W. Flowers, of New York, a member of the Class of 1894 and a Trustee of the University, it has been possible to develop preliminary plans and to make a number of plantings. This is naturally a long-time project, and many years will elapse before the Arboretum will be most useful and most attractive. The University Trustees' Committee on Forestry in their report to the Board refers to the Arboretum as follows:

"The Arboretum should serve as a station for the study of trees and woody plants as individuals and in small groups in their scientific rela-

tions, economic properties, and cultural characteristics, requirements, and possibilities. It should render an economic service by acting as a research laboratory where trees and shrubs can be studied from the viewpoint of a fuller utilization of their commercial possibilities. It should render a cultural service by serving as a center where foresters, landscape architects, nurserymen, gardeners, and the general public may increase their knowledge of indigenous trees and shrubs and where they may become acquainted with the foreign species that can be grown here. Within the University the Arboretum will supply living specimens and material for several branches of botany and forestry."

The development of the Arboretum will proceed along these lines as rapidly as available funds and planting stock will permit.

SCHOLARSHIPS AND FELLOWSHIPS IN FORESTRY

A limited number of graduate scholarships and fellowships are available to men who offer promise of becoming leaders in the forestry profession. These will be available to men of high character and marked scholastic ability, who merit financial aid, as judged by their education, experience, and personal references.

The annual stipend of these scholarships and fellowships ranges from two hundred and fifty dollars (\$250) to seven hundred and fifty dollars (\$750); the exact amount awarded to each successful applicant will vary with his qualifications. Holders of scholarships and fellowships will be expected to pay the tuition fee and such additional fees as are regularly required.

The following arrangements apply to the scholarships and fellowships:

1. The applicant must have received a degree either from a professional school of forestry of good standing or must be a graduate of a recognized college or university. Candidates not graduates of schools of forestry must have had the major work for their degree in botany or soil science and in the allied basic sciences. In addition, he must have reasonably high scholarship to be admitted to full standing in the School of Forestry or the Graduate School of Arts and Sciences. In general, preference will be given to men who have already obtained technical or professional training as represented by a degree from an accredited school of forestry and who have a reading knowledge of French and German.

2. It is highly desirable that a candidate for a scholarship or fellowship state in his application as specifically as possible the problem which he wishes to study. The definite selection of a suitable problem—one that is specific and affords training both in fundamentals and in technique—is very helpful to the committee on awards.

3. Holders of scholarships and fellowships may become candidates for the Master of Forestry, Master of Arts, Doctor of Forestry, or Doctor of Philosophy degrees when they have met the requirements for admission to candidacy for these degrees.

4. Holders of scholarships and fellowships shall devote at least nine consecutive months to an approved program of work in forestry. While in residence they will be expected to do a limited amount of assisting.

5. Application blanks for scholarships and fellowships may be obtained by writing to the Dean of the School of Forestry, Duke University, Durham,

North Carolina. When the blank has been filled out by the applicant it should be returned to the above address, and *must be accompanied by an official transcript of record* showing college or university credits. The application and transcript must be filed not later than March 1 for the following academic year. In case vacancies occur, applications submitted on a later date will be considered.

REQUIREMENTS FOR ADMISSION TO THE SCHOOL OF FORESTRY

The following general requirements of the School of Forestry apply to candidates for the Master of Forestry degree:

Admission to the School of Forestry presupposes that the applicant is either a graduate of a scientific school, college, or university of high standing, but without professional training in forestry; or that he is a graduate of a professional school of forestry of recognized standing. He will present not less than four years of credit of collegiate grade, with at least as many quality-points as hours.¹

An applicant with no professional training in forestry will present a certified transcript of his academic record showing that he has had conferred upon him a degree in arts, science, or engineering; and that he has satisfactorily completed undergraduate work in minimum amount as follows:

One year of botany, including the morphology, physiology, and identification of plants.

One year each of English and of chemistry.

One course each in physics and in the principles of economics.

Mathematics, through college algebra and trigonometry.

It is urged that an applicant without professional training in forestry present additional credits in the above subjects and in one or more of the following subjects: soils, geology, mineralogy, petrology, climatology, surveying, languages (particularly German and French), sociology, political science, philosophy, psychology, and zoology.

An applicant who is a graduate of a professional school of forestry of recognized standing will present a certified transcript of scholastic record showing the award of a degree. Before registering for the first semester of residence, such applicants will be required to select the branch or branches of forestry in which they wish to concentrate the major part of their work and to prepare their proposed programs in conference with the appropriate faculty advisor.

Students must make application for admission in advance of the opening of the school year. Those students entering without acceptable courses in plane surveying, forest surveying, and forest mensuration must take the twelve weeks of work in these subjects in the Summer School, and are required to submit their applications prior to May 1. Students entering with advanced standing in surveying and forest mensuration should make application before September 1. Application blanks will be sent upon request made to the Dean of the School of Forestry.

¹ Grades for each hour of college credit and also for credit earned in the School of Forestry are valued in quality-points as follows: A, 3 points; B, 2 points; C, 1 point; D, no points; and F, no credit and -1 point.

REQUIREMENTS FOR THE DEGREE OF MASTER OF FORESTRY

The degree of Master of Forestry (M.F.) is conferred upon students who have satisfactorily completed two years of study in technical forestry and one term of twelve weeks' work in plane surveying, forest surveying, and forest mensuration in the Summer School. In addition to the Summer School work a total of not less than sixty semester hours' credit is required for the M.F. degree, of which at least fifty-five shall be obtained in the School of Forestry. Each student must obtain at least as many quality points as semester hours' credit under the quality-point system described in footnote 1 of the preceding section.

A two weeks' field trip to typical timber-harvesting, manufacturing, and other forestry operations in the South is conducted by the School and is required as a part of the work in Forest Products Industries (Forestry 212). Other students in the School of Forestry may be permitted to take this trip as opportunities will be available for special work and observations in other branches of forestry in forest types not represented in the Duke Forest.

No student may take less than fifteen or more than eighteen hours in any one semester without special permission of the School of Forestry Faculty. The following work will be required of all candidates for the M.F. degree:

SUMMER SCHOOL

	<i>S.H.</i>
Plane Surveying (C. E. S110).....	3
Forest Surveying (F. S150).....	5
Forest Mensuration (F. S151).....	4

FIRST YEAR

<i>First Semester</i>	<i>S.H.</i>	<i>Second Semester</i>	<i>S.H.</i>
Harvesting Forest Products (F. 211)	3	Forest Products Industries (F. 212)	3
Forest Entomology (F. 231)	3	Forest Pathology (F. 224)	4
Sampling Methods (F. 251)	2	Dendrology (F. 254)	2
Dendrology (F. 253)	2	Silvics (F. 264)	3
Wood Anatomy & Properties (F. 259)	3	Electives	
Forest Soils (F. 261)	3		

SECOND YEAR

Silviculture (F. 265)	5	Forest Valuation (F. 282)	3
Forest Economics (F. 279)	3	Seminar (F. 292)	1
Forest Management (F. 281)	4	Thesis	
Thesis		Electives	
Electives			

Each candidate is required to file in the office of the Dean of the School of Forestry on or before May 15 three copies of a thesis, type-written and bound in accordance with regulations set forth by the Faculty. The thesis shall be based upon an original study made in the field, laboratory, or library.

Work of equivalent grade done in residence at recognized schools of forestry may, with the approval of the Faculty, be accepted as credit toward the M.F. degree. A minimum of one year's residence is required at Duke University. Students who have had satisfactory undergraduate training in forestry may, with the approval of the Faculty, elect to devote the major portion of their time to research under the supervision of one or more members of the Faculty and prepare a more comprehensive thesis than is required of students entering the School without previous work in forestry. Students in the School of Forestry may take in allied departments of the University as electives certain courses approved by the Faculty.

REQUIREMENTS FOR THE DEGREE OF DOCTOR OF FORESTRY

THE DEGREE

The degree of Doctor of Forestry is a research degree. It is based primarily upon evidence of high attainments in a special field of forestry knowledge and upon the production of a thesis embodying the results of original research. It is not based merely upon the completion of a prescribed period of study or upon the obtaining of credit for a given number of courses.

A student who plans to enter upon a program of work leading to the degree of Doctor of Forestry should consult or enter into correspondence with the Dean of the School of Forestry. He will then be advised as to the possibility of obtaining the necessary instruction and supervision of research in the special field desired.

RESIDENCE

The normal period of resident graduate study, following satisfaction of the general requirements for admission to the Duke School of Forestry, is a minimum of two academic years after the student has obtained the graduate professional degree of Master of Forestry, or its equivalent. At least one of these two years of graduate study must be spent in actual residence at Duke University. With the approval of the Faculty of the School of Forestry work of equal grade done in residence at another college or university, or at a research station or institute not connected with a college or university, may be accepted toward a Doctor of Forestry degree. Only in connection with the preparation of the thesis will work be accepted that has been done elsewhere than in residence at a college, university, research station, or institute. A student whose undergraduate work is insufficient in amount or unsatisfactory in character may be re-

quired to spend additional time in preliminary courses essential as a basis for the graduate work he proposes to undertake.

Students whose research is concerned with the study of trees and forest stands in the Duke Forest during the growing season may find it necessary to be at the University during the summer.

Credit for one year of work done in regular sessions of the Summer School at Duke University may be given with the approval of the School of Forestry Faculty. Except in unusual cases, graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence.

APPLICATION FOR CANDIDACY

No student will be admitted as a candidate for the degree of Doctor of Forestry until he has obtained the professional graduate degree of Master of Forestry or its equivalent, either at Duke University or at a professional school of forestry of recognized standing. A student desiring to become a candidate for the Doctor of Forestry degree is ordinarily required to file with the Dean of the School of Forestry, at the beginning of his graduate work toward this degree, a formal application indicating in which field and under what professor he proposes to carry on research. A committee of the Faculty will then be appointed to supervise the student's work, with the professor in charge of his research as chairman. If and when the committee finds that the preliminary requirements of the major field have been satisfied, the chairman of the committee will report the fact in writing to the Dean of the School of Forestry. In the case of students who come to Duke University for only the last year of graduate work, and in special cases approved by the School of Forestry Faculty, the application for recognition as a candidate for the Doctor of Forestry degree may be filed later than provided above, but not later than October 15 of the academic year in which it is desired that the degree be conferred.

PROGRAM OF STUDY

The program of study of a candidate for the Doctor of Forestry degree will be arranged after consultation with the committee provided for in the preceding section and is subject to the approval of the Dean and Faculty of the School of Forestry. The student must select a major field and one or two minor related fields. Both major and minor may be selected in different branches of forestry or the minor may be taken in a related field in some other school or department of Duke University.

FOREIGN LANGUAGES

A reading knowledge of two foreign languages is required. One language shall be either French or German, and the other optional to fit the requirements of the student's problem. No student can come up for his preliminary examination before having satisfied the language require-

ments for the Doctor's degree. Foreign language examinations are conducted by the appropriate language department, or in special cases, by a qualified member of the Faculty of Duke University.

PRELIMINARY EXAMINATION

Toward the end of the first full year of graduate work for the Doctor of Forestry degree (or in special cases early in the second year), a preliminary examination of each candidate will ordinarily be held covering the general field of his studies. This examination will be conducted by the committee in charge of the student's work and will be written. A student who passes the examination will be recognized as a candidate for the Doctor of Forestry degree. A student's major and minor subjects will ordinarily be included in this preliminary examination.

If a student fails on his first examination, he may make a second attempt after six months upon recommendation of his committee and the approval of the Dean of the School of Forestry. Two failures on this examination make the student ineligible to continue work toward the Doctor of Forestry degree at Duke University.

THESIS

The thesis for the Doctor of Forestry degree must be a contribution to knowledge. The subject of the thesis must be filed with the Dean of the School of Forestry on or before October 15 of the academic year in which the candidate desires to take the final examination for his degree. The subject must receive the written approval of the professor under whom the thesis is being written and of the Dean of the School of Forestry. The thesis must be completed to the satisfaction of the major professor. Four typewritten copies in approved form must be deposited with the Dean of the School of Forestry on or before May 1 if the student desires to be examined on the thesis in the same academic year. The title page must be approved by the Dean of the School of Forestry. Two of the copies, the original and a carbon copy, are placed in the School of Forestry library, one copy goes to the major advisor, and one is returned to the student.

The candidate's thesis must be published either in its original form or in a modified form approved by the Dean of the School of Forestry and the committee in charge of the candidate's work. In its published form the title page should include this statement: "A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Forestry in the School of Forestry of Duke University." Ten copies of the published thesis should be deposited in the office of the Dean of the School of Forestry within a reasonable time after publication. The degree will not be conferred until publication of the thesis, in approved form, within three years has been guaranteed in a way satisfactory to the Dean of the School of Forestry and the professor under whom the thesis was written.

FINAL EXAMINATION

The final examination will be on the thesis and on related subject matter and will be oral. Approximately one year must elapse between the dates of the preliminary examination and the final examination, except in special cases approved by the School of Forestry Faculty. Two failures on this examination make a student ineligible to continue work toward the Doctor of Forestry degree at Duke University. The second examination may be given only upon the recommendation of the professor in charge of the thesis and the approval of the Dean of the School of Forestry.

GRADING

Members of the Faculty are expected to report grades of graduate students to the School of Forestry Office not later than February 15 for the first semester and not later than June 15 for the second semester on the cards provided for that purpose. An average grade of "B" or better will be required for all work, beyond that for the degree of Master of Forestry, that is to be credited toward the Doctor of Forestry degree. A mark of "Incomplete" may be given when a student has failed, for an acceptable reason, to complete some portion of the required work in which his standing is generally satisfactory. Unless a report is made within one year that the work has been satisfactorily completed, all credit will be lost.

FORESTRY IN THE GRADUATE SCHOOL

Graduate work toward the Master of Arts and Doctor of Philosophy degrees in the more scientific branches of forestry is available to adequately prepared students at Duke University. This work is given through the Division of Forestry of the Graduate School of Arts and Sciences by certain members of the School of Forestry Faculty.

The following special conditions will influence the acceptance of students for graduate study in forestry: The student must have received a degree from a professional school of forestry of recognized standing or from an approved college or university. Graduates of professional schools of forestry must also have had adequate training in liberal arts and sciences, approximating 86 semester hours, before being admitted to candidacy for the Master of Arts or Doctor of Philosophy degrees. College graduates who have had specialized training in botany or soil science and in allied basic subjects, such as physics, chemistry, geology, and zoology, may pursue graduate study and research only in the specialized fields for which their previous work has qualified them.

The Forestry Staff will determine whether a student is qualified to pursue graduate study in any of the special fields of forestry in which work is available.

The Master of Arts and Doctor of Philosophy degrees are attained through scientific work rather than technical or professional training in forestry. Work for these degrees may be pursued only in forest-tree physiology, wood anatomy and properties, forest pathology, forest entomology, silvics, forest soils, forest mensuration, forest management, and forest economics, except that a major cannot be taken in forest management. A student upon registration chooses a field of study which may lie in two or more departments. The members of the Graduate School Faculty best qualified in that field are named as the student's advisory committee, regardless of the department of which they are members. This committee will advise the student in the planning and conduct of his work and will evaluate it when completed.

A reading knowledge of French and German must be acquired early in the course of graduate study in forestry because much of the forestry literature of the world is written in or has summaries in these languages. For the Ph.D. degree the language requirement must be met before the preliminary examination is taken and usually before the preparation of the thesis is begun.

The length of time required for a student to obtain the Master of Arts and Doctor of Philosophy degrees in forestry is determined by the character of his previous work and by the quality of his work in the Graduate School. Upon the recommendation of the Forestry Staff and with the approval of the Council on Graduate Instruction, work of equal grade done in residence at another college or university, or at a research

station or institute not connected with a college or university, may be accepted toward a Ph.D. degree, but at least the last year or the first two years of graduate study must be spent in actual residence at Duke University. Only in connection with the preparation of the thesis will work be accepted that has been done elsewhere than in residence at a college, university, or research station.

Students whose research is concerned with the study of trees and forest stands in the Duke Forest during the growing season may find it necessary to be at the University during the summer.

The field of study may include advanced work in allied subjects as well as advanced work in forestry. The student should have covered, however, most of the basic subjects prior to entering the Graduate School. The required advanced work will depend upon the student's previous training and the special field of study selected. Before beginning his work the student must obtain approval of his proposed program of study, including the plans for the research for his thesis. Courses of study must be correlated with each other and with the thesis research.

For further information on requirements for admission to the Graduate School of Arts and Sciences and on the general requirements for the Master of Arts and Doctor of Philosophy degrees reference should be made to the *Bulletin of the Graduate School of Arts and Sciences*.

COURSES AND SUBJECTS OF INSTRUCTION

With the exception of the summer school courses, odd-numbered courses are offered in the autumn semester, and even-numbered courses are offered in the spring semester.

IN THE SUMMER SCHOOL

C.E. S110. Plane Surveying.—A special section of C.E. S10 intended for students in Forestry and others of advanced standing. *Three weeks, nine hours a day, beginning May 31. 3 s.h.*

PROFESSORS BIRD AND W. H. HALL AND MR. WILLIAMS

S150. Forest Surveying.—Application of plane surveying to forest problems; practice in making boundary and topographic surveys of forested tracts, using both intensive and extensive methods. Work includes use of transit, level, traverse board, topographic abney and slope tape, and aneroid barometer. Prerequisites: Civil Engineering, S110, Plane Surveying, or equivalent. *Five weeks, eight hours a day, beginning June 21. 5 s.h. (w)*

ASSOCIATE PROFESSOR MAUGHAN

S151. Forest Mensuration.—Field studies in methods of measuring content and growth of trees and forest stands; practice in timber estimating, log scaling, use of mensurational instruments, and collection of basic data. *Four weeks, eight hours a day, beginning July 26. 4 s.h. (w)*

PROFESSOR SCHUMACHER

FOR SENIORS AND GRADUATES

211. Harvesting Forest Products.—Methods of harvesting and transporting to utilization plants all products obtained from forests, including saw logs, pulpwood, poles, ties, stave and veneer bolts, naval stores, distillation wood, and other commercial commodities, with emphasis on application of methods best adapted to managed forests in important forest regions of North America and consideration of costs. *3 s.h. (w)*

PROFESSOR WACKERMAN

212. Forest Products Industries.—Preparation, manufacture, and use of tree products for all purposes including lumber, paper, naval stores, veneer, cooperage, boxes, distillation, and other specialized products with emphasis on methods of manufacturing and kinds of wood required for various commodities. Inspection of typical forest operations and forest products manufacturing plants in the South during two weeks of spring semester. Prerequisite: Forestry 211 or equivalent. *3 s.h. (w)*

PROFESSOR WACKERMAN

213. Seasoning and Preservation of Wood.—Principles of seasoning lumber and other forest products by air drying and kiln drying, types of kilns and their operation; principles, methods, and materials used in treating wood to increase its durability. Prerequisite: Forestry 250 or equivalent. *3 s.h. (w)*

PROFESSOR WACKERMAN

214. Marketing Forest Products.—Methods of selling and distributing timber, lumber, and other forest products in domestic and foreign trade; transportation methods; promotional activities of trade associations; competition between producing regions for markets and problems arising from the development of wood substitutes. Prerequisites: Forestry 211 and 212, or equivalents. *3 s.h. (w)*

PROFESSOR WACKERMAN

224. Forest Pathology.—Special reference to diseases of forest trees. Prerequisites: Botany 1 and 2, and Forestry 253-254, or equivalents. 4 s.h. (w)
PROFESSOR WOLF

231. Forest Entomology.—Morphology, general classification, life histories, and control of insects injurious to forest trees, logs, and lumber. 3 s.h. (w)
PROFESSOR BEAL

236. Forest Game Management.—Characteristics and life histories of forest animals; interrelationship between animals and forests; management of forest animals for revenue; control of noxious species. 3 s.h. (w)
PROFESSOR BEAL

251. Sampling Methods in Forestry.—Statistical background for solution of sampling problems with special reference to sample inventory of a forest property. Prerequisite: Forestry S151. 2 s.h. (w) PROFESSOR SCHUMACHER

252. Forest Mensuration.—Empirical equations and curve fitting appropriate for construction of timber yield tables, tree volume and taper tables; significance tests and graphical solution of equations. Assignments require operation of calculating machines. Prerequisite: Forestry 251. 2 s.h. (w)
PROFESSOR SCHUMACHER

253-254. Dendrology.—Nomenclature, classification, and identification of woody plants with special reference to species indigenous to southeastern United States and other important forest regions of temperate North America. Laboratory and field work. Prerequisite: one year of botany. 4 s.h. (w)
ASSOCIATE PROFESSOR HARRAR

256. Wood Pulp and Pulp Products.—Characteristics of pulp and paper fibres; processes employed in pulp manufacture; methods of refining and testing pulps; theory and practice of bleaching and hydration; the manufacture of papers and other cellulose derivatives. Prerequisites: Forestry 212 and 259, or equivalents. 3 s.h. (w)
ASSOCIATE PROFESSOR HARRAR

257. Design of Forestry Experiments and Analysis of Data.—Role of experimental design in field and laboratory, and statistical analysis of data as aspects of scientific method in forest research. 5 s.h. (w)
PROFESSOR SCHUMACHER

259. Wood Anatomy and Properties.—Anatomical, chemical, and non-mechanical physical properties of wood; macroscopic and microscopic identification of more important woods of the United States. Prerequisites: One year of Botany and Chemistry 1 and 2, or equivalents. 3 s.h. (w)
ASSOCIATE PROFESSOR HARRAR

260. Timber Mechanics.—Comprehensive study of mechanical properties of wood and factors affecting its strength; strength-moisture relationships; standard methods of timber testing and application of strength data in development of working stresses; use of graphic statics in analysis of stress in wooden structures. Prerequisites: Physics 1 and Forestry 259, or equivalents. 3 s.h. (w)
ASSOCIATE PROFESSOR HARRAR

261. Forest Soils.—Origin, development, and classification of soils with special emphasis on those developed in climates supporting forests; morphological, physical, and chemical properties of soils in relation to growth of trees; field identification, field sampling, laboratory analysis, and interpretation of field and laboratory observations; interrelationships of soil and forest cover. Prerequisites: Chemistry 1 and 2, and Physics 1, or equivalents; physical geology and analytical chemistry are also desirable. 3 s.h. (w)
ASSISTANT PROFESSOR COILE

264. Silvics.—Ecological foundations of silviculture with special reference to forest site factors; influence of forests on their environment; growth and development of trees and stands; origin, development, and classification of forest communities; methods of studying forest environments. Desirable prerequisites: Plant physiology, plant ecology, and Forestry 253-254 and 261, or equivalents. 3 s.h. (w)
PROFESSOR KORSTIAN

265. Theory and Practice of Silviculture.—Principles governing natural regeneration and treatment of forest stands and their application to main commercial forest species, types, and regions of temperate North America; reproduction methods, intermediate cuttings, cultural operations, and silvicultural plans. Field practice includes marking timber for various kinds of cuttings, cultural treatments, preparation of plans for silvicultural treatment of forests, and study of intensively managed forests. Prerequisite: Forestry 264 or equivalent. 5 s.h. (w)
PROFESSOR KORSTIAN

266. Forest Seeding and Planting.—Place of artificial regeneration in practice of forestry; reforestation surveys and plans; collection, extraction, cleaning, testing, and storage of forest tree seeds; direct seeding; nursery practice; forest planting. 2 s.h. (w)
PROFESSOR KORSTIAN

273. Forest Protection.—Fundamental principles of forest protection; protection against atmospheric agencies, injurious plants, insects, domestic animals, and wild life; causes of forest fires and their prevention; presuppression activities; fire suppression; fire control costs and standards; fire plans. 2 s.h. (w)
ASSOCIATE PROFESSOR THOMSON

276. Forest Policy.—Critical study of forestry movement and development of a forestry policy, particularly in United States; brief résumé of forestry in important foreign countries; public land laws of United States; development of Federal and State forestry; forestry laws. 2 s.h. (w)
ASSOCIATE PROFESSOR THOMSON

279. Economics of Forestry.—Principles of forest economics. Economic and social values of forests; forest resources and wood requirements; economics of wood production and consumption; prices of forest products; forestry and public finance; forestry and land use; forestry credit; forest fire insurance; forestry as a private business enterprise. Prerequisite: at least one course in the principles of economics. 3 s.h. (w)
ASSOCIATE PROFESSOR THOMSON

281. Forest Management.—Principles of organizing forest properties for systematic management including surveys, inventories, subdivision, and preparation of management plans for control of operations; principles of forest regulation, actual and normal forests, rotations, cutting cycles, and methods of regulating the cut for sustained yields. Prerequisites: Forestry S150, S151, and 251, or equivalents. 4 s.h. (w)
ASSOCIATE PROFESSOR MAUGHAN

282. Forest Valuation.—Principles involved in appraising value of forests as business enterprises; valuation of land and timber, soil rent and forest rent theories, cost values, market values and capital values, profit, and rate earned; appraisal of stumpage values and damage appraisals; financial aspects of sustained yield management compared with destructive logging. Prerequisite: Forestry 281 or equivalent. 3 s.h. (w)
ASSOCIATE PROFESSOR MAUGHAN

292. Seminar.—Interrelation of various branches of forestry in their application to forestry problems; assigned topics with special reference to current forestry activities. 1 s.h. (w)
THE STAFF

211A to 282A. Special Studies in Forestry.—Work on the same level as the foregoing Senior-Graduate courses to meet the needs of individual students. Credits and hours to be arranged. THE STAFF

FOR GRADUATES

301-302. Advanced Studies in Forestry.—Credits to be arranged. To meet individual needs of graduate students in the following branches of forestry:

- a. **Silvics.**—Prerequisites: Forestry 253-254, 261, and 264, or equivalents. PROFESSOR KORSTIAN
- b. **Forest Soils.**—Prerequisite: Forestry 261 or equivalent. ASSISTANT PROFESSOR COILE
- c. **Silviculture.**—Prerequisite: Forestry 265 or equivalent. PROFESSOR KORSTIAN
- d. **Forest Management.**—Prerequisite: Forestry 281 or equivalent. ASSOCIATE PROFESSOR MAUGHAN
- e. **Forest Economics.**—Prerequisite: Forestry 279 or equivalent. ASSOCIATE PROFESSOR THOMSON
- f. **Wood Anatomy and Properties.**—Prerequisites: Forestry 259 and 260, or equivalents. ASSOCIATE PROFESSOR HARRAR
- g. **Forest Mensuration.**—Prerequisites: Forestry S151, 251, and 252, or equivalents. PROFESSOR SCHUMACHER
- h. **Forest Entomology.**—Prerequisite: Forestry 231 or equivalent. PROFESSOR BEAL
- i. **Forest Utilization.**—Prerequisites: Forestry 211 and 212, or equivalents. PROFESSOR WACKERMAN
- j. **Dendrology.**—Prerequisite: Forestry 253-254 or equivalent. ASSOCIATE PROFESSOR HARRAR

311. Advanced Forest Utilization.—Analysis of the principles of determining the cost of and returns from harvesting timber for various products and other uses of forests; study of factors governing the relation of tree size to net stumpage values; and the application of these principles and methods in the solution of actual case problems. Prerequisite: Forestry 211 or equivalent. 2 s.h. (w) PROFESSOR WACKERMAN

323-324. Advanced Forest Pathology.—Advanced study and research on life histories and control of diseases of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and forest pathology. Credits to be arranged. PROFESSOR WOLF

351-352. Advanced Physiology of Forest Trees.—Advanced study and research on problems in physiology of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and plant ecology or silvics. Credits to be arranged. ASSOCIATE PROFESSOR KRAMER

354. Forest Soil Fertility.—Experimental approach to the problems of fertility in forest soil. Influence of stand composition on nitrogen transformation. Methods of studying the exchange complex and the significance of base exchange in forest soil fertility. Prerequisites: Forestry 251 and 261, and plant physiology, or equivalents; bacteriology and analytical and organic chemistry are desirable. 3 s.h. (w) ASSISTANT PROFESSOR COILE

356. Economic Forces in Forestry.—Analysis of classical and contemporary theories of forest valuation. Principles underlying the measurement of forces determining forestry values. Prerequisites: Forestry 279 and 282, or equivalents; courses in economic theory are desirable. 2 s.h. (w)

ASSOCIATE PROFESSOR THOMSON

357-358. Research in Forestry.—Credits to be arranged. Students who have had adequate training may do research under direction of members of the Faculty in the branches of forestry indicated under Courses 301-302 with the same prerequisites as thereunder noted. Each branch to bear the same letter designation as under Courses 301-302.

THE STAFF

FEES AND EXPENSES

The following tables show the general fees and charges collected from all students and the special fees collected from those taking laboratory courses. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

GENERAL FEES

Matriculation, per semester.....	\$ 25.00
Tuition, per semester.....	100.00
Room-rent—See the detailed statement that follows.	
Athletic Fee, admitting students to all athletic contests held on the University grounds, per semester.....	5.00
Damage Fee, payable annually at the time of first registration.....	1.00
Medical Fee, per semester.....	5.00
Library Fee, per semester.....	5.00
Commencement Fee, payable once by graduate students in the last semester before a degree is conferred.....	3.00
Diploma Fee, payable by candidates for degrees at the beginning of the second semester, refunded if the diploma is not awarded.....	5.00
For further information concerning room-rent, see below.	

SPECIAL FEES

Graduate students in the sciences are required to pay the special laboratory fees for courses as fixed by the various departments. An administrative fee is charged in connection with special research in the summer under direction of a member of the Faculty. Special laboratory and materials fees in forestry are as follows:

Forestry 224, 253-254, 259, 260, 264, 357a, and 358a.....	\$2.50
Forestry 261, 351, 352, 354, 357b, and 358b.....	\$2.50 to \$5.00

TRANSCRIPTS

A student desiring to transfer from Duke University to another institution is entitled to one transcript of his record. A charge of one dollar is made for each additional copy.

PAYMENTS TO FELLOWS AND SCHOLARS

Payments by the University of stipends to fellows and scholars are made in four installments, on November 25, January 25, March 25, and May 25. Fellows and scholars are required to pay the regular tuition fee and such additional fees as are ordinarily required of graduate students.

ROOMS AND CONDITIONS OF RENTING THEM

ROOM-RENT FOR MEN OF DUKE UNIVERSITY

West Campus, per semester.....	\$50.00, \$62.50, and \$75.00
East Campus, per semester.....	\$30.00 and \$50.00
All graduate courses are given on the West Campus.	

Rooms are reserved only for students who have been officially accepted by the University. They are rented for no shorter period than one semester. The occupancy of a room for a period of less than one semester will cost the student \$1.00 each day unless the occupant makes the necessary arrangements with the Director of the Business Division before occupying the room. A room deposit of \$25.00 is required of each applicant for admission. The fee is deducted from the room charges at the time of registration for the full semester. The reservation fee will be refunded to any applicant not accepted by the University provided the official receipt for the fee, given to all paying it, is presented either in person or by letter to the Treasurer's Office, but students who make application and are accepted will not be entitled to have the reservation fee refunded unless the request is made on or before August 1.

A resident student who wishes to retain his room for the succeeding year must first pay a reservation fee of \$25.00 to the Treasurer's Office and then notify the office of the Director of the Business Division on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. When a room is once engaged by a student, no change will be permitted except with the consent of the Director of the Business Division. Leaving one room and occupying another without permission is strictly against the rule and will render the offender liable to a charge for both rooms for the entire semester. No occupant is permitted to rent or sublet a room to another occupant. The use of a room for merchandising of any kind is strictly forbidden.

The University does not assume the responsibility of selecting and assigning roommates, though it will gladly render any assistance possible in the matter.

DORMITORIES FOR MEN

On the West Campus there are four groups of dormitories, Craven, Crowell, Kilgo, and Few. Each group forms a quadrangle enclosing a court. Few Quadrangle is reserved especially for the use of graduate and professional school students.

BOARDING ACCOMMODATIONS

West Campus.—Beginning with the academic year 1930-31 the University opened its dining hall in the Union on the West Campus with accommodations sufficient to provide in a superior way for all resident men students. It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed \$25.00 per month.

The Union is the logical center of student activities for men, and it will be found desirable for male students to board in its supervised halls. In the Union are located the University Post Office, the University Store, the University Barbershop, and all publication staff offices.

In addition to the Union dining halls a coffee shop is operated for the convenience of students and visitors.

ESTIMATED EXPENSES FOR AN ACADEMIC YEAR

The necessary expenses of a graduate student are moderate; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses naturally depend upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition	\$200.00	\$200.00	\$200.00
Matriculation	50.00	50.00	50.00
Room-rent	100.00	125.00	150.00
Board	225.00	225.00	225.00
Laundry	20.00	25.00	30.00
Books	22.50	30.00	45.00
Library Fee	10.00	10.00	10.00
Athletic Fee	10.00	10.00	10.00
Damage Fee	1.00	1.00	1.00
Medical Fee	10.00	10.00	10.00
<i>Total</i>	<u>\$648.50</u>	<u>\$686.00</u>	<u>\$731.00</u>

ENROLLMENT, 1939-40

STUDENTS IN THE SCHOOL OF FORESTRY

*Adsit, Francis Wayne.....	Hamilton, Ohio	HH-126
B.S.F., Purdue University, 1938		
*Andrews, Leslie Kearns.....	Mt. Gilead, N. C.	Duke University
B.S.F., North Carolina State College, 1936		
Barney, Charles Wesley.....	Cuba, N. Y.	HH-219
B.S., New York State College of Forestry, 1938		
M.S., University of Vermont, 1939		
*Beasley, William Lee, Jr.....	Louisburg, N. C.	HH-019
B.S.F., North Carolina State College, 1939		
*Beck, Clifford William.....	Buffalo, N. Y.	HH-02
B.S., New York State College of Forestry, 1939		
*Crumpacker, William Johnson..	Durham, N. C.	1306 S. Duke Street
B.S., Duke University (Requirements completed Summer, 1939. Degree to be conferred June, 1940)		
*Hermelink, Herman Milton....	Kansas City, Mo.	HH-06
B.S.F., University of Michigan, 1939		
*Jones, William Curry, Jr.....	Chapman, Ala.	HH-018
A.B., Birmingham-Southern College, 1938		
*Knorr, Philip Noel.....	Modesto, Calif.	HH-313
B.S., University of California, 1938		
*Lynch, Donald Walton.....	Highwood, Mont.	HH-313
B.S.F., Montana State University, 1939		
McKeown, Eugene.....	Leavittsburg, Ohio	912 Burch Avenue
B.A., Battle Creek College, 1935		
*McWilliams, John Scott.....	New Albany, Ind.	HH-126
B.S.F., Purdue University, 1938		
*Miller, Ira Malcolm.....	Brooklyn, N. Y.	HH-018
A.B., Emory University, 1938		
Olson, Earl Franklin.....	Norris, Tenn.	HH-01
B.S., Iowa State College, 1933		
Robertson, James Campbell Hay..	Fort Collins, Colo.	University Apts., C-1-D
B.S.F., University of Washington, 1927		
M.S., University of California, 1933		
*Scholtes, Wayne Henry.....	Clinton, Iowa	HH-019
B.S., Iowa State College, 1939		
*Smith, Robert Lewis.....	Lancaster, Pa.	901 Fifth Street
B.S., Pennsylvania State College, 1936		
*Steirly, Charles Cornell.....	Hampton, Va.	902 W. Trinity Avenue
B.S., New York State College of Forestry, 1933		
*Watkins, Virgil Gray.....	Kent's Store, Va.	810 Second Street
B.S., University of Virginia, 1937		

Total..... 19

* Candidate for the degree of Master of Forestry in 1940.

PRE-FORESTRY SENIORS IN THE SCHOOL OF FORESTRY

Baldwin, Alan Thorrestrup.....	Wilmington, Del.	AA-103
Bew, James William.....	Margate City, N. J.	AA-103
Heller, Robert Chester.....	East Orange, N. J.	R-205
<i>Total</i>		3

STUDENTS OF FORESTRY IN THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Massey, Calvin LeRoy.....	Wheatridge, Colo. 908 W. Markham Avenue B.S., Colorado State College, 1939	
Toole, Eben Richard.....	Lanham, Md. B.S., New York State College of Forestry, 1935 A.M., Duke University, 1938	HH-219
<i>Total</i>		2

INSTITUTIONS REPRESENTED

Battle Creek College	1	North Carolina State College	2
Birmingham-Southern College ...	1	Pennsylvania State College	1
Colorado State College	1	Purdue University	2
Duke University	2	University of California	2
Emory University	1	University of Michigan	1
Iowa State College	2	University of Vermont	1
Montana State University	1	University of Virginia	1
New York State College of Forestry	4	University of Washington	1
		<i>Total Institutions</i>	16

GEOGRAPHICAL DISTRIBUTION

Alabama	1	New Jersey	2
California	1	New York	3
Colorado	2	North Carolina	3
Delaware	1	Ohio	2
Indiana	1	Pennsylvania	1
Iowa	1	Tennessee	1
Maryland	1	Virginia	2
Missouri	1	<i>Total States</i>	16
Montana	1		

GENERAL SUMMARY

Students in the School of Forestry.....	19
Pre-forestry Seniors in the School of Forestry.....	3
Students of Forestry in the Graduate School of Arts and Sciences.....	2
<i>Total Enrollment</i>	24
Total number of institutions represented.....	16
Total number of states represented.....	16

VOLUME 12

February, 1940

NUMBER 4

BULLETIN OF DUKE UNIVERSITY

College of Engineering



1939-1940

ANNOUNCEMENTS FOR 1940-1941

PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL BULLETINS

For GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY



COLLEGE OF ENGINEERING

1939-1940

ANNOUNCEMENTS FOR 1940-1941

DURHAM, NORTH CAROLINA
1940

TABLE OF CONTENTS

	PAGE
UNIVERSITY CALENDAR	5
ADMINISTRATIVE OFFICERS	7
EXECUTIVE COMMITTEE	7
INSTRUCTIONAL STAFF	7
COUNCIL ON ENGINEERING INSTRUCTION	9
ENGINEERING COURSES OFFERED	10
GENERAL REGULATIONS	15
Admission to College of Engineering	15
Admission by Certificate	16
Admission by Examination	16
Admission to Advanced Standing	17
Special Students	17
REQUIREMENTS FOR DEGREE	18
COURSES OF INSTRUCTION	21
FEES AND EXPENSES	29

UNIVERSITY CALENDAR

1940

- June 11. Tuesday, 9:00 A.M.—Registration of students for Summer School, first term.
- June 12. Wednesday, 2:00 P.M.—Instruction begins for Summer School, first term.
- July 4. Thursday, Independence Day: a holiday.
- July 22-23. Monday, Tuesday—Final examinations for Summer School, first term.
- July 24. Wednesday, 9:00 A.M.—Registration of students for Summer School, second term.
- July 24. Wednesday, 2:00 P.M.—Instruction begins for Summer School, second term.
- Sept. 2-3. Monday, Tuesday—Final examinations for Summer School, second term.
- Sept. 12. Thursday, 9:00 A.M.—Dormitories open to Freshmen.
- Sept. 12. Thursday, 8:00 P.M.—Assembly for all entering Freshmen; Freshman Orientation Program begins.
- Sept. 17. Tuesday—Freshman instruction begins.
- Sept. 17. Tuesday—Registration and matriculation of new students with advanced standing.
- Sept. 18. Wednesday, 11:00 A.M.—Formal opening of the College; registration of matriculated students.
- Sept. 19. Thursday—Instruction for Sophomores, Juniors, and Seniors begins.
- Sept. 19-21. Thursday, 9:00 A.M.-1:00 P.M.; 2:30 P.M.-4:00 P.M.; Friday, 9:00 A.M.-1:00 P.M.; 2:30 P.M.-5:00 P.M.; Saturday, 9:00 A.M.-1:00 P.M.—Registration of graduate students.
- Nov. 28. Thursday—Thanksgiving Day: a holiday.
- Dec. 11. Wednesday—Duke University Day.
- Dec. 20. Friday, 1:00 P.M.—Christmas recess begins.

1941

- Jan. 3. Friday, 8:00 A.M.—Instruction is resumed.
- Jan. 17. Friday—Mid-year examinations begin.
- Jan. 31. Friday—Last day for matriculation for second semester.
- Feb. 1. Saturday—Second semester begins.
- March 22. Saturday, 1:00 P.M.—Spring vacation begins.

- March 31. Monday, 8:00 A.M.—Instruction is resumed.
- April 15. Tuesday—Last day for submitting orations for Wiley Gray Contest.
- April 30. Wednesday—Last day for selection of courses for ensuing year.
- May 10. Saturday—Earliest date for beginning of Honors examination.
- May 16. Friday—Final examinations begin.
- May 31. Saturday—Commencement opens; Senior Class Day; meeting of the Board of Trustees.
- June 1. Sunday—President's Address to Graduating Class; Commencement Sermon.
- June 2. Monday—Commencement Address; Alumni-Alumnae Luncheon; Graduating Exercises; Lowering of the Flag by the Graduating Class.

ADMINISTRATIVE OFFICERS

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., Litt.D., Ed.D., LL.D. <i>President</i>	West Campus
ROBERT LEE FLOWERS, A.M., LL.D. <i>Vice-President in the Business Division, Secretary and Treasurer</i>	West Campus
WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D. <i>Vice-President in the Educational Division and Dean of the University</i>	West Campus
HERBERT JAMES HERRING, A.B., A.M. <i>Dean of Men</i>	Myrtle Drive
ALAN KREBS MANCHESTER, A.B., A.M., Ph.D. <i>Dean of Freshmen</i>	Myrtle Drive
WILLIAM ALLEN TYREE, A.B. <i>Director in the Business Division</i>	610 Buchanan Road
ERNEST S. THEISS, B.S. in M.E., M.S. <i>Assistant to the Dean of Men, Housemaster</i>	Southgate Dormitory
WILLIAM HOLLAND HALL, A.B., A.M., B.C.E., M.S.C.E. <i>Dean, College of Engineering</i>	111 Watts Street

EXECUTIVE COMMITTEE, COLLEGE OF ENGINEERING

W. H. HALL, <i>Chairman</i>	W. J. SEELEY
W. A. TYREE, <i>Secretary</i>	R. S. WILBUR
H. C. BIRD	

INSTRUCTIONAL STAFF

HAROLD CRUSIUS BIRD, Ph.B., C.E. <i>Professor of Civil Engineering, Chairman of Department of Civil Engineering</i>	1209 Virginia Avenue
WILLIAM HOLLAND HALL, A.B., A.M., B.C.E., M.S.C.E. <i>Professor of Engineering</i>	111 Watts Street
WALTER JAMES SEELEY, E.E., M.S. <i>Professor of Electrical Engineering, Chairman of Department of Electrical Engineering</i>	1005 Urban Avenue
RALPH SYDNEY WILBUR, B.S. in M.E., M.E. <i>Professor of Mechanical Engineering, Chairman of Department of Mechanical Engineering</i>	1317 Arnette Avenue
ROBERT G. CHAPMAN, B.S. in M.E., M.M.E. <i>Instructor in Mechanical Engineering</i>	1001 Watts Street

EDWARD K. KRAYBILL, B.S. in E.E. <i>Instructor in Electrical Engineering</i>	113 Watts Street
OTTO MEIER, JR., B.S. in E.E., M.S., E.E. <i>Assistant Professor of Electrical Engineering</i>	916 Monmouth Avenue
LEO CHARLES PIGAGE, M.E., M.M.E. <i>Instructor in Mechanical Engineering</i>	903 Sixth Street
FREDERICK JEROME REED, M.E., M.S. <i>Assistant Professor of Mechanical Engineering</i>	2203 Englewood Avenue
ERNEST S. THEISS, B.S. in M.E., M.S. <i>Instructor in Mechanical Engineering</i>	Southgate Dormitory
CHARLES ROWE VAIL, B.S. in E.E. <i>Instructor in Electrical Engineering</i>	1007 West Trinity Avenue
JOHN DARGAN WATSON, A.B., B.S. in C.E., M.S. <i>Assistant Professor of Civil Engineering</i>	913 Duke Street
JAMES WESLEY WILLIAMS, A.B., B.S. in C.E. <i>Instructor in Civil Engineering</i>	1507 West Pettigrew Street
<hr/>	
LYMAN GAYLORD BONNER, A.B., Ph.D. <i>Instructor in Physics</i>	905 Sixth Street
DAVID WILLIAMS CARPENTER, A.B., A.M., Ph.D. <i>Assistant Professor of Physics</i>	137 Pinecrest Road
FRANCIS GEORGE DRESSSEL, B.S., M.S., Ph.D. <i>Instructor in Mathematics</i>	Route 1, Box 106, Durham
WILLIAM STONE FITZGERALD, A.B., A.M. <i>Instructor in English</i>	6 Powe Apartments, 603 Watts Street
JOHN JAY GERGEN, A.B., M.A., Ph.D. <i>Professor of Mathematics</i>	1012 West Trinity Avenue
JOSEPH GREENWOOD, A.B., A.M., Ph.D. <i>Assistant Professor of Mathematics</i>	804 Third Street
MALCOLM HAYDEN HEBB, A.B., Ph.D. <i>Instructor in Physics</i>	132 Pinecrest Road
ARTHUR OWEN HICKSON, A.B., A.M., Ph.D. <i>Assistant Professor of Mathematics</i>	Legion Avenue, Tuscaloosa Forest
DOUGLASS HILL, A.B., M.A., Ph.D. <i>Instructor in Chemistry</i>	Dixon Road
MARCUS EDWIN HOBBS, A.B., A.M., Ph.D. <i>Instructor in Chemistry</i>	10 Powe Apartments
ARCHIBALD CURRIE JORDAN, A.B., A.M. <i>Assistant Professor of English</i>	147 Pinecrest Road
JAMES MAYNARD KEECH, A.B., A.M., Ph.D. <i>Instructor in Economics</i>	Nation Avenue
EDWARD ROY CECIL MILES, B.S., M.A., Ph.D. <i>Assistant Professor of Mathematics</i>	1028 Gloria Avenue

JAMES CARLISLE MOUZON, B.A., Ph.D. <i>Assistant Professor of Physics</i>	132 Pinecrest Road
KARL BACHMAN PATTERSON, A.B., A.M. <i>Assistant Professor of Mathematics</i>	1024 Monmouth Avenue
LEWIS PATTON, A.B., Ph.D. <i>Associate Professor of English</i>	1511 West Pettigrew Street
WILLIAM WALTER RANKIN, JR., B.E., M.A. <i>Professor of Mathematics</i>	1011 Gloria Avenue
JOHN H. ROBERTS, A.B., Ph.D. <i>Assistant Professor of Mathematics</i>	Legion Avenue, Tuscaloosa Forest
JOSEPH JOHN SPENGLER, A.B., M.A., Ph.D. <i>Professor of Economics</i>	1601 Lakewood Avenue
ROBERT NORTH WILSON, A.B., M.S. <i>Professor of Chemistry</i>	822 Third Street
Assisted by members of General Faculty listed in <i>General Bulletin</i> .	

COUNCIL ON ENGINEERING INSTRUCTION

President W. P. FEW	J. C. MOUZON, Physics
Vice-President W. H. WANNAMAKER	M. E. HOBBS, Chemistry
Dean W. H. HALL	J. J. SPENGLER, Economics
H. C. BIRD, Civil Engineering	LEWIS PATTON, English
W. J. SEELEY, Electrical Engineering	JOHN JAY GERGEN, Mathematics
R. S. WILBUR, Mechanical Engineering	W. A. TYREE, Secretary

ENGINEERING COURSES OFFERED

GENERAL STATEMENT

Duke University, through the College of Engineering, offers standard four-year courses in civil, electrical, and mechanical engineering. These departments are housed respectively in Bivins, Asbury, and Branson buildings. The James H. Southgate Memorial Building, set aside for the housing of engineering students, contains social rooms, recitation rooms, gymnasium, dining room, and kitchen, as well as dormitory facilities. Meals are provided in this building at the same rate which prevails in the other University dining halls.

CURRICULA: The courses of study in the several branches of engineering are set up to conform as closely as possible to the findings of the Society for the Promotion of Engineering Education. Fundamental training is given in English, mathematics, and the sciences, as well as in the technical subjects leading to professional work in civil, electrical, and mechanical engineering. Election of courses in the Department of Economics and Business Administration is encouraged in the belief that the combining of such courses with the rigorous engineering program affords excellent preparation for the types of commercial or industrial activities in which engineering training is most valuable.

FACULTY: The members of the Instructional Staff have been chosen particularly for their ability to teach. Instruction is given in small sections, insuring personal attention. The laboratory is used to supplement the classroom, and at present the same instructor carries his class through both the classroom and laboratory work. This is made possible only where classes are limited in size.

STUDENT ACTIVITIES: Three national engineering societies, the American Society of Civil Engineers, the American Society of Mechanical Engineers, and the American Institute of Electrical Engineers, are represented by student chapters operating under national charters. An honorary engineering fraternity, Delta Epsilon Sigma, was organized several years ago for the purpose of stimulating good scholarship among the engineering students. All four of these organizations afford unusual opportunities for the members to present papers and to conduct discussions in certain phases of engineering not covered in the classroom. Engineering students are in every sense a part of the student body of Duke University, enjoying the general advantages of the University and being subject to the general rules and regulations.

HISTORY: The teaching of engineering is not new at Duke University. From 1887 to 1893 formal courses in civil and mining engineering leading to the Bachelor of Science degree were offered by Trinity College. After their discontinuance in 1893, the teaching of engineering subjects was begun again in 1903 and has continued uninterruptedly since that

time. At present there are three departments offering courses in civil, electrical, and mechanical engineering leading to the degree Bachelor of Science in these branches of engineering. These three departments constitute the College of Engineering.

CIVIL ENGINEERING

The civil engineer's field of work may be divided into four major divisions: sanitary—dealing with water works, sewerage systems, and garbage disposal; hydraulic—interested in flood control, river improvement, irrigation, drainage, and water power; transportation—concerned with railroads, airports, highways, waterways, park systems, traffic control, and city planning; and structural—dealing with bridges, buildings, foundations, dams, tunnels, tanks, bins, and various industrial structures. His function is chiefly one of design and construction, although often it includes maintenance. In order to train a student in these various lines of effort, the following equipment is provided.

HIGHWAY MATERIALS: Complete equipment is available for the preparation and routine testing of aggregates, cement, and bituminous materials. There is also a Hubbard stability machine for additional tests.

SANITARY ENGINEERING: In the sanitary laboratory there is a complete equipment for performing the physical, chemical, bacteriological, and microscopic tests as outlined by the American Public Health Association. Different types of water current meters are available for work in steam gaging.

SOILS TESTING: This laboratory is fully equipped to carry out the experiments generally used in testing soil for highway purposes.

CEMENT TESTING: There is available complete equipment for the testing of cement and aggregates, such as an automatic shot testing machine, flow table, Ro-Tap sieve shaker, a two-hundred-thousand-pound hydraulic compression machine, and other necessary supplies.

SURVEYING: For use in the courses in surveying there are thirteen transits, twenty-one levels, a precise theodolite and a precise level, three plane table outfits, solar attachments, sextants, compasses, barometers, and other light equipment.

STRESS ANALYSIS: Advanced work in stresses is carried on by means of a large-sized Begg's deformer and photoelastic equipment.

GENERAL ENGINEERING MATERIALS: This laboratory housed in the Civil Engineering Building, contains the equipment necessary to give undergraduate and graduate instruction in the determination of the physical properties of materials. In the laboratory are two universal testing machines, torsion, fatigue, and impact machines, a proving ring, several hardness testers, and an exceptionally complete set of accessories and small instruments for the determination of the stress-deformation characteristics of steel, wood, and concrete.

ELECTRICAL ENGINEERING

The field of electrical engineering covers the generation of electrical energy, both by water power and steam power, its transmission, distribu-

tion, and utilization; communication, both by wire and by radio, and the allied art of television; transportation, by locomotive, bus, and water; and illumination.

THE MACHINERY LABORATORY receives its electric power from the Duke Power Company over a 2300-volt, 60-cycle, three-phase line. The equipment includes an A. C. to D. C. motor-generator set for supplying the laboratory with direct current, four direct connected D. C. to D. C. motor-generator sets, two D. C. to A. C. belted sets, a G. E. sine wave motor-generator set, a Westinghouse phase displacement dynamometer, a General Electric type A. C.-D. C. synchronous converter, for one-, two-, three-, or six-phase operation, a self-starting, single-phase battery-charging converter, numerous single-phase constant potential transformers, a three-phase transformer, a constant current transformer equipped with a typical load of series street lamps, three-phase induction regulators, numerous loading devices both electrical and mechanical, and a number of miscellaneous D. C. and A. C. motors and generators. Complete equipment for testing fractional horsepower motors, together with eighteen typical motors, was recently added to this laboratory. In addition, the equipment includes a complete line of measuring instruments for both general testing purposes and precision measurements, and three oscillographs for viewing and photographing wave forms.

THE COMMUNICATIONS LABORATORY is exceptionally well equipped and contains complete apparatus for carrying out all kinds of communication experiments at both audio and radio frequencies. The audio-frequency equipment includes a 200-mile open-wire artificial telephone line, a vacuum tube amplifier-milliammeter-voltmeter, 6-A transmission measuring set, vacuum-tube oscillators calibrated for frequencies ranging from 25 to 100,000 cycles per second, a 1,000-cycle motor-generator, a direct reading frequency meter reading from 20 to 20,000 cycles per second; impedance bridges for both audio and intermediate frequencies; standards of resistance, inductance, and capacitance; filters of various kinds; a high quality amplifier, power amplifiers, loud speakers, noise meter, and other instruments for general test purposes. A complete Automatic Electric Company telephone exchange is included in this laboratory. The radio-frequency equipment consists of short wave and broadcast receivers, precision wave meter, automatic field strength recorder, field intensity meter, standard signal generator, thermo-couples for current and voltage determinations, condensers, inductors, and meters.

THE ELECTRONICS LABORATORY, adjoining the Communications Laboratory, is completely equipped for studies of vacuum tubes and vacuum tube circuits: power supply units, special high resistance meters, oscillators, vacuum tube voltmeters, thermo-couples, etc.

THE STANDARDIZING LABORATORY is equipped with standard instruments for the purpose of checking and calibrating meters used in any of the other laboratories.

THE PROJECTS LABORATORY is set aside for the use of students who are working on special projects requiring set-ups which cannot be disturbed

by regular laboratory experiments. This laboratory is made available to Seniors who elect projects course 265-266.

THE ELECTRICAL CIRCUITS LABORATORY is equipped with all necessary apparatus and instruments for carrying out experiments on direct current and alternating current circuits, such as studies of various types of meters, resistance and conductivity measurement, storage batteries, magnetic measurements, series and parallel circuits, power factor, etc.

THE AMATEUR RADIO STATION, W4AHY, is equipped with a 75-watt crystal-controlled C. W. transmitter, a Collins 30FXB 100-watt phone transmitter, Hammarlund Pro receiver, National SW5 receiver, a pair of RCA trancivers, and necessary testing and measuring equipment. The station is controlled and operated by the Engineers' Radio Association.

MECHANICAL ENGINEERING

Mechanical engineering as a profession is concerned with power and machines to generate power and to apply it to useful ends. A field so broad includes all lines of industry, but among the special fields in which mechanical engineers are engaged are combustion or power production engineering, machine and machine-tool design, railway motive power, automotive engineering, aviation engineering, refrigeration, air conditioning, and industrial management.

In order to lay a foundation for a successful career in mechanical engineering, it is necessary to provide a tie between theory and practice, to become familiar with engineering apparatus and instruments as well as their testing and calibration. Laboratory work is therefore necessary. The equipment in the Branson Mechanical Laboratory has been carefully arranged in a number of groups, to serve the needs of the undergraduate for efficiently carrying out the program indicated above.

BOILER ROOM. The boiler room contains a one-hundred horsepower oil-fired boiler with complete accessories and controls by which it may be operated by students, providing steam for all steam experiments and tests.

STEAM EQUIPMENT. Conveniently located adjacent to the boiler room are a Troy horizontal self-oiling automatic steam engine, a Troy vertical throttling governor steam engine, and a Sturtevant steam turbine, together with brakes and accessories for their complete testing, either as units or as components in a small-scale power plant. Equipment for studying flow and quality of steam, an injector, and an arrangement for the study and testing of steam traps are included in this group.

AIR COMPRESSION. An electrically driven 12 x 10 Ingersoll-Rand air compressor has been arranged with accessories and instruments for testing it, and, in addition, provides means for studying the flow of high-pressure air through pipes, valves, and fittings.

INTERNAL COMBUSTION EQUIPMENT. Automobile and Diesel engines connected to electric and hydraulic dynamometers and generators are part of this laboratory. Appropriate instruments are provided for the determi-

nation of capacity, mechanical and thermal efficiency, and heat balance in each case.

HYDRAULIC APPARATUS. A Cameron centrifugal pump driven by a variable speed motor provides for a very complete determination of capacity and efficiency tests as well as being a controllable source of water for tests covering hydraulics as applied to mechanical engineering.

INSTRUMENT ROOM. An instrument room is provided for the storing and maintenance of instruments used in the laboratories. These instruments include; steam engine and internal combustion engine indicators and reducing motions, tachometers and speed counters, planimeters, pressure gages and calibrating equipment, thermometers of all types, scales and small tools.

LUBRICANTS AND FUELS TESTING LABORATORY. There are complete facilities for proximate analyses and calorific determinations of solid, liquid and gaseous fuels, as well as for all the standard tests of lubricants.

Additional equipment provides adequately for boiler feedwater analysis, study of the flow of water through pipes and fittings, blower testing and flow of air through ducts, and a number of tests in the field of air conditioning.

ADMISSION TO COLLEGE

GENERAL REGULATIONS

Admission to the College of Engineering of Duke University is on a selective basis, dependent upon the ability, attainments, and character of the applicant. No student is admitted until the Council on Admissions has received for him a scholastic record from school or college, a certificate of vaccination and of good health, and satisfactory evidence of good character and ability. Prospective students and relatives are invited to visit the University and the College of Engineering in particular. This would be advantageous to the applicant since it would enable him to acquaint himself with the facilities of the University, and to discuss possible courses of study.

Certain days are announced in the University Calendar each year for the registration, classification, and sectioning of students. Those students who are admitted later than the dates announced must pay to the Treasurer \$5.00 additional for the privilege of matriculation.

All correspondence relating to admission of men should be addressed to the Secretary of Duke University, Duke Station, Durham, N. C.

ADMISSION TO COLLEGE OF ENGINEERING

An applicant for admission to the Freshman Class in engineering must have completed at least fifteen units of preparatory work, partly in required and partly in elective subjects. A unit represents a year of work in a subject in an accredited secondary school, provided the work done in that subject is approximately one fourth of the annual amount of work regularly required in the school.

The subjects in which this credit may be offered and the maximum amount of credit acceptable in each subject are given in the following table:

	UNITS		UNITS
English	4	Botany	1
Latin	4	Zoology	1
Greek	3	General Biology	1
German	3	Physical Geography	1
French	3	General Science	1
Spanish	3	Agriculture	2
Mathematics	4	Mechanical Drawing	2
History and Civics	4	Woodwork, Forging, and	
Physics	1	Machine Work	2
Chemistry	1	Household Economics	2
		Commercial Subjects	3

For a detailed explanation of the units in the table above, see the definitions as set forth by the Southern Association of Colleges and Secondary Schools and other regional associations.

ADMISSION BY CERTIFICATE

Applicants able to submit certificates of proficiency from accredited schools in subjects accepted for admission to the Freshman Class will be admitted without examination. These certificates must be properly made out on the regular blanks furnished by the University, signed by the principal of the school from which the applicant comes, and presented before or at the opening of the academic year. The applicant must have completed the course of the school from which he comes.

At least nine and one-half of the fifteen units required for admission must come from the following:

Required Units

English	3 units
A Foreign Language	2 units
*Science	1 unit
History	1 unit
**Algebra	1½ or 2 units
Plane Geometry	1 unit

Elective Units

In addition to the above required units, sufficient elective units must be offered to make a total of fifteen. It is recommended that these electives be chosen from the following list:

Algebra	½ unit
Solid Geometry	½ unit
Trigonometry	½ unit
†German or French or Latin or Spanish or Greek	1 to 4 units
History or Civics (not the required unit)	1 to 3 units
Physics or Chemistry or Biology (not the required unit)	1 to 3 units

ADMISSION BY EXAMINATION

Students who present fifteen units for admission from schools not accredited by the University, and students who present the proper units but whose grades are not acceptable, are required to validate their units by entrance examinations in English and in mathematics and such other tests as the University may prescribe, including the test required by the North Carolina College Conference.

Students who have not the required units in English or in mathematics but who are otherwise acceptable must, before admission, clear this deficiency by entrance examinations.

* Wherever possible physics or chemistry should be offered for this requirement.

** Examination required to validate offering.

† One elective unit in any of the above languages will be accepted for admission provided the language requirement has been satisfied without it. As many as four units will be accepted in any one of these languages.

ADMISSION TO ADVANCED STANDING

Students may be admitted to advanced standing from other approved institutions under the following conditions: All applicants must have fulfilled the equivalent of the requirements for admission to the Freshman Class, must present official certificates of all work done in other institutions, and have honorable dismissal from the institutions they previously attended.

Applicants for advanced standing should present, so far as possible, subjects corresponding to those required at Duke University. Students admitted to advanced standing may not during their first semester elect more than the minimum number of hours required of the class which they enter except by permission of the Dean. Further, in addition to other requirements, a minimum of one full year in residence at Duke University with the satisfactory completion of at least thirty semester hours of work approved for Seniors, with an average grade of "C," is required of all candidates for the Bachelor's degree.

Students who have transferred from other colleges must, in order to make their provisional classification final, pass during their first year of residence not less than the equivalent of four year courses with an average grade of "C" or higher.

The date for the registration and classification of students with advanced standing from other institutions is announced in the University Calendar. Students who are admitted later than this date are required to pay to the Treasurer \$5.00 additional for the privilege of matriculating.

FRESHMAN WEEK

The week immediately preceding the opening of College is set aside for the induction of Freshmen. During this period health examinations, psychological tests, and placement tests are given, on the basis of which Freshmen are sectioned in English and mathematics. The Freshmen are divided into groups for instruction in the use of the Library, in the regulations of the student body, and in all matters pertaining to the adjustment of the individual to a new environment. Attendance upon these exercises is required of all Freshmen.

SPECIAL STUDENTS

Students of mature age not fully prepared to enter the Freshman Class may be admitted as special students and allowed to enroll for such work as they are prepared to carry. Further, they are required to take fifteen hours of classwork a week.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL, ELECTRICAL, OR MECHANICAL ENGINEERING

GENERAL STATEMENT

The studies for the degree of Bachelor of Science in Civil, Electrical, or Mechanical Engineering are designed for students who are preparing for civil, electrical, or mechanical engineering, as a profession, and lead to the following degrees: B.S. in C.E., B.S. in E.E., and B.S. in M.E.

Each of these degrees requires one hundred and thirty-eight semester hours of work of which one hundred and twenty-two must be completed with an average grade of "C." If a foreign language is elected, it must be taken two years unless a student has sufficient entrance credits to enable him to pursue a more advanced course.

Prospective students should note that immediately after the final examination in May or June a three weeks' course in surveying is given under the direction of the Summer School. This course is required of all civil engineering students at the end of their Freshman year and is required of all other engineering students before graduation.

GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL, ELECTRICAL, OR MECHANICAL ENGINEERING

GROUP I

CIVIL ENGINEERING

Freshman Year

FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
Mathematics 9	5	Mathematics 10	5
Chemistry 1	4	Chemistry 2	4
English 1	3	English 2	3
Physics 17	3	Physics 18	3
Drawing 1	2	Drawing 2	2
Physical Education		Physical Education	
	<hr/> 17		<hr/> 17

Three weeks of Surveying 10 in summer. Credit, 3 semester hours.

Sophomore Year

Mathematics 59	4	Mathematics 60	4
Physics 57	3	Physics 58	3
Statics 7	3	Kinetics 8	2
Surveying 11	2	Materials 118	3
Highways 15	3	Highways 117	2
Economics 51	3	Economics 52	3
Physical Education		Physical Education	
	<hr/> 18		<hr/> 17

Junior Year

	S.H.		S.H.
Strength of Materials 107	4	Hydraulics 108	4
Curves and Earthwork 113	2	Curves and Earthwork 114	2
Structures 131	4	Structures 132	4
Engineering Elective	3	Engineering Elective	3
Elective	3	Elective	3
	<hr/> 16		<hr/> 16

Senior Year

Hydraulic Engg. 123	4	Hydraulic Engg. 124	4
Concrete 133	3	Concrete 134	3
Railroads 119	3	Railroads 120	2
Seminar 137	1	Seminar 138	1
Electives	6	Astronomy 112	2
	<hr/> 17	Electives	5
			<hr/> 17

GROUP II**ELECTRICAL ENGINEERING***Freshman Year*

FIRST SEMESTER		SECOND SEMESTER	
Mathematics 9	5	Mathematics 10	5
Chemistry 1	4	Chemistry 2	4
English 1	3	English 2	3
Physics 17	3	Physics 18	3
Drawing 1	2	Drawing 2	2
Physical Education		Physical Education	
	<hr/> 17		<hr/> 17

Three weeks of Surveying 10 in summer. Credit, 3 semester hours.

Sophomore Year

Mathematics 59	4	Mathematics 60	4
Physics 57	3	Physics 58	3
Statics 7	3	Kinetics-Mechanism 82	4
Electrical Engineering 51	3	Electrical Engineering 52	3
Economics 51	3	Economics 52	3
Steam Engineering 85	2	Physical Education	
Physical Education			<hr/> 17
	<hr/> 18		

Junior Year

Theory of D.C. Circuits 151	3	Theory of A. C. Circuits 152	3
Hydraulics 108	4	Strength of Materials 107	4
Electrical Circuits Lab. 161	1	Electrical Circuits Lab. 162	1
Heat Power Engg. 181	3	Heat Power Engg. 182	3
Differential Equations 131	3	Electrical Measurements 104	3
Mechanical Engineering		Mechanical Engineering	
Laboratory 199	1	Laboratory 200	1
	<hr/> 15		<hr/> 15

Senior Year

	S.H.		S.H.
A.C. Machinery 257	3	A.C. Machinery 258	3
Electric Power Trans. 159	3	Electric Power Stations 158	3
Communication 261	3	Communication 262	4
D.C. Machinery 155	2	Seminar 166	1
D.C. Machinery Lab. 163	1	Electives	6
Seminar 165	1		
Electives	6		
	<hr/>		<hr/>
	19		17

GROUP III**MECHANICAL ENGINEERING***Freshman Year*

FIRST SEMESTER		SECOND SEMESTER	
Mathematics 9	5	Mathematics 10	5
Chemistry 1	4	Chemistry 2	4
English 1	3	English 2	3
Physics 17	3	Physics 18	3
Drawing 1	2	Drawing 2	2
Physical Education		Physical Education	
	<hr/>		<hr/>
	17		17

Three weeks of Surveying 10 in summer. Credit, 3 semester hours.

Sophomore Year

Mathematics 59	4	Mathematics 60	4
Physics 57	3	Physics 58	3
Statics 7	3	Kinetics-Mechanism 82	4
Constructive Processes 79	3	Steam Engineering 86	3
Economics 51	3	Economics 52	3
Physical Education		Physical Education	
	<hr/>		<hr/>
	16		17

Junior Year

Hydraulics 185	3	Machine Design 170	3
Strength of Materials 107	4	Internal Comb. Engines 186	3
Electrical Engineering 153	3	Electrical Engineering 154	3
Thermodynamics 187	3	Thermodynamics 188	3
Mechanical Engineering		Mechanical Engineering	
Laboratory 189	1	Laboratory 190	2
Elective	3	Elective	3
	<hr/>		<hr/>
	17		17

Senior Year

Machine Design 171	3	Aeronautics 198	3
Power Plants 191	3	Industrial Engineering 192	3
Mech. Engg. Laboratory 193	2	Mech. Engg. Laboratory 194	2
Heating and Air Conditioning 195	3	Refrigeration 196	2
Seminar 173	1	Seminar 174	1
Electives	5	Electives	6
	<hr/>		<hr/>
	17		17

COURSES OF INSTRUCTION

COLLEGE OF ENGINEERING

NOTE: Courses primarily for Freshmen and Sophomores are numbered from 1 to 99; those primarily for Juniors and Seniors from 100 to 199; those primarily for Seniors and graduates from 200 to 299. The amount of credit for each course is given in semester hours following the description of the course.

The designation (w) or (E) indicates that the course is to be given on the West Campus or on the East Campus. The designation (W & E) indicates that the course will be given on each campus.

Odd-numbered courses are offered in the fall semester and even-numbered courses are offered in the spring semester. Double numbers indicate that the course is a year course and must be continued throughout the year if credit is received.

GENERAL ENGINEERING

1-2. Engineering Drawing.—The study and practice of mechanical drawing of elementary machine parts with special reference to such topics as dimensioning, material specifications and elements of intersections, projections and developments. Six laboratory hours. **4 s.h. (E)** MR. FIGAGE

5. Descriptive Geometry.—Problems relating to point, line, plane, and solid relationships in space. One recitation, three laboratory hours. **2 s.h. (E)** MR. FIGAGE

7. Statics.—Concurrent forces, parallel forces, nonconcurrent and non-parallel forces, centroids, friction, moment of inertia. Prerequisites: courses 1 and 2, Mathematics 9 and 10. **3 s.h. (E)** STAFF

8. Kinetics.—Translation, rotation, work, energy, and momentum. Prerequisites: course 7, and Mathematics 59. **2 s.h. (E)** STAFF

107. Strength of Materials.—Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses; etc. Three recitations, three laboratory hours. Prerequisite: course 7. **4 s.h. (E)** STAFF

108. Hydraulics.—Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite: course 7. **4 s.h. (E)** Either semester. STAFF

CIVIL ENGINEERING

PROFESSORS BIRD AND HALL; ASSISTANT PROFESSOR WATSON; MR. WILLIAMS

S10. Plane Surveying.—Use of instruments; transit, stadia, compass and plane table surveying; simple triangulation; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, and departures; areas by planimeter; methods of plotting; survey and plot of sections of the campus by stadia, and transit and tape. Eight hours a day, three weeks, Summer School. Prerequisites: course 1, and trigonometry. **3 s.h. (E)**

11. Higher Surveying.—Care and adjustment of instruments; topographical surveying; surveys and resurveys; laying out and division of land; public land system; further calculations, omitted measurements, areas by double longitude; quantities from profiles and cross sections. Prerequisite: course 10. 2 s.h. (E) MR. WILLIAMS

S110. Plane Surveying.—Similar to course 10 but especially arranged for students in forestry. Eight hours a day, three weeks, Summer School. Prerequisites: Engineering Drawing and Trigonometry. 3 s.h.

111. Higher Surveying.—For students in forestry. In addition to the ground covered in course 11, the field work includes a more thorough drill in the use of the Beaman stadia arc and the topographic abney level and trailer tape while more attention is given to the preparation of finished maps in the office work. Eight hours a day, three weeks, Summer School. Prerequisite: course 10 or 110. 3 s.h.

112. Field Astronomy.—Determination of latitude, longitude, time, and azimuth by observation on sun and stars; use of precise transit, solar attachment, and sextant. Prerequisite: course 11. 2 s.h. (E) PROFESSOR BIRD

113-114. Curves and Earthwork—Highways.—Thorough drill in the calculation and laying out of simple, compound, and easement curves, widening of curves, vertical curves, setting slope stakes, ordinary earthwork computations, and mass diagrams. Prerequisite: course 10. 4 s.h. (E) ASSISTANT PROFESSOR WATSON

15. Highway Engineering.—Location, construction, and maintenance of roads and pavements; dust prevention; road economics. 3 s.h. (E) PROFESSOR HALL

117. Highway Engineering.—Standard tests of stone, gravel, and bituminous materials. Prerequisite: course 15. 2 s.h. (E) ASSISTANT PROFESSOR WATSON

118. Materials of Engineering.—Study and testing of materials other than those taken up in course 117. 3 s.h. (E) MR. WILLIAMS

119-120. Railroad Engineering.—Differences between highway and railway practice affecting curves and earthwork. A. R. E. A. transition curve, frogs, switches, and crossings. Preliminary and location survey of a railway of sufficient length to secure familiarity with methods of actual practice. Paper location made with estimate of cost. Construction and maintenance of track and trackwork, economics, and operating conditions affecting location. Prerequisite: course 113-114. 5 s.h. (E) ASSISTANT PROFESSOR WATSON

123-124. Hydraulic Engineering.—

(a) **Hydrology**—Factors affecting precipitation; evaporation from land and water surfaces; relation of precipitation to run-off; estimating run-off; floods and flood flows. Stream gauging.

(b) **Public Water Supply**—Quantity and quality of water required, hydraulics of wells, reservoirs, works for purification and distribution of water. Standard laboratory tests for chemical and bacteriological examination of water.

(c) **Sewerage**—Sewerage systems, rainfall and storm water flow, sizes of storm and sanitary sewers, sewage disposal. Standard laboratory tests of sewage. Prerequisite: course 108. 8 s.h. (E) PROFESSOR HALL

131. Steel Structures—Stresses.—Roofs, parallel chord bridges under all types of loads, inclined top chord bridges, including subdivided panels, wind bracing. Prerequisite: course 7. 4 s.h. (E) PROFESSOR BIRD

132. Steel Structures.—Design.—Built beams, plate girders, tension members, compression members, tension and compression members, end posts, stringers, floor beams, pins, plates, etc. Drafting. Prerequisites: courses 107 and 131. 4 s.h. (E) PROFESSOR BIRD

133. Reinforced Concrete.—Theory and design of reinforced concrete beams, slabs, columns. Prerequisite: course 107. 3 s.h. (E) PROFESSOR BIRD

134. Masonry Structures.—Ordinary foundations, dams, retaining walls, arches, piers, abutments. Prerequisites: courses 107 and 133. 3 s.h. (E) PROFESSOR BIRD

137-138. Seminar.—Students are required to make reports and to talk on current engineering literature or on such other topics as may be assigned. 2 s.h. (E) STAFF

143-144. Projects in Civil Engineering.—This course may be assigned by the Chairman of the Department to certain Seniors who have shown an aptitude for research in one distinct field of civil engineering, in which case it may be substituted for certain general civil engineering courses. 3-6 s.h. (E) Either semester. STAFF

E.240. Indeterminate Structures.—Introductory course dealing with the application of theory of least work, deflection, and rotation to indeterminate stresses. Problems are solved analytically, graphically, and by deformer. Prerequisites: course 131 and ability to read French or German. 3 s.h. (E) PROFESSOR BIRD

ELECTRICAL ENGINEERING

PROFESSOR SEELEY; ASSISTANT PROFESSOR MEIER;
MESSRS. KRAYBILL AND VAIL

51-52. Survey of Electrical Engineering.—A general survey course covering the entire field of electrical engineering, intended to give the electrical engineering student a general preview of the subject as a whole. Required of Sophomores. Prerequisites: Freshman mathematics and concurrent physics. 6 s.h. (E) ASSISTANT PROFESSOR MEIER

151. Theory of Direct Current Circuits.—A course consisting of lectures and recitations covering the fundamental theory of direct current circuits. Two-hour class, two-hour computation. Prerequisites: course 51-52, Physics 57-58, Mathematics 59, 60. Mathematics 131 should be taken concurrently. 3 s.h. (E) MR. VAIL

152. Theory of Alternating Current Circuits.—This course covers the algebra of vectors and complex quantities, nonsinusoidal waves, polyphase circuits, harmonics, and unbalanced three-phase circuits. Two-hour class, two-hour computation. Prerequisites: course 151, Mathematics 131. 3 s.h. (E) MR. VAIL

153-154. Principles of Electrical Engineering.—An elementary course consisting of lectures, recitations, and laboratory covering the principles of direct and alternating current machinery, and their applications, designed especially for students in civil and mechanical engineering. This course includes one three-hour period in the electrical machinery laboratory per week. Prerequisite: Physics 57-58. 6 s.h. (E) MESSRS. KRAYBILL AND VAIL

155. Direct Current Machinery.—A study of the principles which underlie the design and operation of all types of direct current machinery. Prerequisites: courses 151, 161-162. 2 s.h. (E) ASSISTANT PROFESSOR MEIER

156. Electric Transportation.—Construction, operation, and uses of electric equipment in air, land, and sea transportation. Elective. Prerequisites: courses 151, 152, 161-162, or 153-154. 3 s.h. (E) MR. KRAYBILL

158. Electric-Power Stations.—A course of lectures and recitations pertaining to the design, construction, and operation of electric power stations, both steam and hydraulic. Consideration of prime movers; generating machinery; switchboards; instruments, relays, and protective devices; operation and management; visits to neighboring plants. Prerequisites: courses 151, 152, and 187-188. 3 s.h. (E) MR. VAIL

159. Electric-Power Transmission.—A course of lectures and recitations on the factors involved in the transmission of electrical energy over long distances and the use of hyperbolic functions in the solution of transmission line problems. Two-hour class, two-hour computation. Prerequisites: courses 151, 152. 3 s.h. (E) PROFESSOR SEELEY

161-162. Electrical Circuits Laboratory.—This course provides experimental verification of the theory developed in courses 151 and 152, and should be taken concurrently. Three hours per week. 2 s.h. (E)

PROFESSOR SEELEY, MR. VAIL

163. Direct Current Machinery Laboratory.—A study of the technique of testing direct current machines and a thorough analysis of their performance. Concurrent with course 155. 1 s.h. (E)

ASSISTANT PROFESSOR MEIER, MR. KRAYBILL

165-166. Electrical Engineering Seminar.—Seniors are required to present reports and dissertations on material appearing in current engineering literature. Juniors may participate, but without credit. Scheduled at night. 2 s.h. (E) STAFF

257-258. Alternating Current Machinery.—This course covers the theory underlying the design, construction, and operation of synchronous generators and motors, transformers, converters, single-phase and polyphase motors of all types. Two-hour class, three-hour laboratory. Prerequisites: courses 152, 155. 6 s.h. (E) ASSISTANT PROFESSOR MEIER

261. Communication Engineering, Audio Frequency.—An advanced course on the principles underlying voice-frequency communication covering nature of speech and sound, wave propagation over metallic circuits, filters; resistance, inductance, capacitance at audio frequencies; transmission characteristics of communication equipment. Two-hour class, three-hour laboratory. Prerequisites: courses 151, 152, Mathematics 131. 3 s.h. (E) PROFESSOR SEELEY

262. Communication Engineering, Radio Frequency.—An advanced course on the principles underlying radio communication, covering vacuum tubes, vacuum-tube circuits, oscillating and coupled circuits, antennae, radiation, transmission and reception. Three-hour class, three-hour laboratory. Prerequisite: course 261. 4 s.h. (E) PROFESSOR SEELEY

263-264. Mathematical Analysis of Electrical Circuits.—An advanced course on the detailed mathematical analysis of certain circuits used in electrical engineering, with an introduction to the use of operational calculus as applied to electrical circuits. Elective. Prerequisites: courses 151, 152 and Mathematics 131. 6 s.h. (E) PROFESSOR SEELEY

E.265-266. Projects in Electrical Engineering.—Project work may be undertaken only by those who show special aptitude, or who have had previous experience on some problem. The consent of the Chairman of the Department must be obtained before registering. Seniors only. Elective credit. 3-6 s.h. (E) PROFESSOR SEELEY AND STAFF

MECHANICAL ENGINEERING

PROFESSOR WILBUR; ASSISTANT PROFESSOR REED; MESSRS. CHAPMAN,
PIGAGE, AND THEISS

79. Constructive Processes.—Recitation course covering fundamentals of metallography and general processes in foundry, forge, and machine shop. Trips to neighboring shops are included. Prerequisite: Chemistry 2. Open only to mechanical engineering students. **3 s.h. (E)** MR. CHAPMAN

82. Kinetics-Mechanism.—Motions of particles; Newton's laws of motion and application to motions of rigid bodies, work, energy, impulse and momentum. Linkages, belts, cams, gears and trains of mechanism. Three lectures and three laboratory hours. Prerequisites: G. E. 2, G. E. 7, Mathematics 59. Corequisite: Mathematics 60. **4 s.h. (E)**

ASSISTANT PROFESSOR REED, MESSRS. CHAPMAN AND PIGAGE

85. Steam Engineering.—Elementary principles of boilers, engines, turbines, and auxiliaries; properties of steam, fuels, and combustion. For electrical engineering students. Prerequisite: Physics 18. **2 s.h. (E)** MR. PIGAGE

86. Steam Engineering.—Elementary principles of boilers, steam engines, turbines, internal combustion engines, and auxiliaries; properties of steam, fuels, and combustion. Laboratory demonstrations of principles. Two recitations, three laboratory hours. Prerequisite: Physics 18. **3 s.h. (E)**

MESSRS. CHAPMAN, PIGAGE, AND THEISS

170-171. Machine Design.—Applications of principles of strength of materials and constructive processes to design of riveted and welded joints, pressure vessels and machine elements, followed by design of at least one complete machine. Two lectures, three laboratory hours. Prerequisites: G. E. 107, M. E. 79, M. E. 82. **6 s.h. (E)**

ASSISTANT PROFESSOR REED AND MR. CHAPMAN

173-174. Seminar.—Students are required to make reports and to talk on current engineering literature or on such topics as may be assigned. **2 s.h. (E)** STAFF

175-176. Projects in Mechanical Engineering.—This course may be assigned by the Chairman of the Department to certain Seniors who express a desire for such work and who have shown aptitude for research in one distinct field of mechanical engineering. Either semester. **3 s.h. (E)**

PROFESSOR WILBUR AND STAFF

181-182. Heat Power Engineering.—A short course in engineering thermodynamics followed by applications to power plant design. For civil and electrical engineering students. Prerequisites: M. E. 85, Mathematics 60. **6 s.h. (E)**

ASSISTANT PROFESSOR REED

185. Hydraulics.—Fluid statics; kinematics of fluid flow; application of fluid dynamics theory to flow through orifices, weirs, and pipes; general principles of centrifugal pumps and turbines. Prerequisite: course 82. **3 s.h. (E)**

PROFESSOR WILBUR AND MR. CHAPMAN

186. Internal Combustion Engines.—Principal cycles; fuels and fuel mixtures; effect of real mixtures on theoretical cycles; combustion; carburetion and fuel injection. Thermodynamic analysis of engine performance. Modern developments in the internal combustion engine. Three recitations. Prerequisite: M. E. 187. **3 s.h. (E)**

PROFESSOR WILBUR

187-188. Engineering Thermodynamics.—A study of thermodynamic properties and processes of gases, vapor and gas-vapor mixtures; cycles; efficiencies and performance of steam power plant equipment. Three recitations. Prerequisites: course 86 and Mathematics 60. 6 s.h. (E)

PROFESSOR WILBUR AND MR. THEISS

189-190. Junior Mechanical Engineering Laboratory.—Open only to mechanical engineering students. Principles of steam and fuel calorimeters; gas analysis; oil testing measurements of steam, air, and water flow; elementary steam engine and boiler tests. Three laboratory hours first semester, six hours second semester. Prerequisites: course 86 and course 187-188, concurrently. 3 s.h. (E)

MR. THEISS

191. Power Plant Calculations.—Study of economic and engineering factors in developing steam power plants. Consideration of the performance of boilers, prime movers, condensers and various auxiliaries in various groupings as they affect the plant heat balance. Three recitations. Prerequisites: M. E. 187-188 or 181-182. 3 s.h. (E)

PROFESSOR WILBUR

192. Industrial Engineering.—A study of the industrial growth and present tendencies of productive industries as concerns the engineer. Specific topics treated are: plant location; organization; production and cost controls, wage payment, etc. Seniors only. Three recitations. 3 s.h. (E)

MR. PIGAGE

193-194. Senior Mechanical Engineering Laboratory.—Advanced engineering tests of performance and economy of steam engines, turbines, boilers and power plant accessories, internal combustion engines, heating and refrigerating equipment; heat balances and heat transfer. Six laboratory hours. Prerequisite: M. E. 190. Corequisites: M. E. 191, M. E. 195, M. E. 196. 4 s.h. (E)

MR. THEISS

195. Heating and Air Conditioning.—Fundamentals of heating and air conditioning, determination of heat losses and gains, design of steam, hot water and warm air heating and air conditioning systems for homes, offices, and industrial buildings. Prerequisites: M. E. 188 or M. E. 182. 3 s.h. (E)

ASSISTANT PROFESSOR REED

196. Refrigeration.—Fundamentals of refrigerating systems and design, and applications in industry. Prerequisites: M. E. 188 or M. E. 182, and M. E. 190 or M. E. 200. 2 s.h. (E)

ASSISTANT PROFESSOR REED

198. Aeronautics.—Aerodynamic principles applied to airfoils, propellers, and the complete airplane; dynamic loading and performance calculations. Prerequisites: courses 171 and 185. 3 s.h. (E)

MR. CHAPMAN

199-200. Junior Mechanical Engineering Laboratory.—Open only to electrical and civil engineering students who have elected M. E. 181-182. Work covers use of various engineering measurement apparatus, flow of air, steam and water, with economy tests on steam engines and turbines, boilers and internal combustion engines. Three laboratory hours. Prerequisite: M. E. 85. (E)

MR. THEISS

REQUIRED NONENGINEERING SUBJECTS

1-2. General Inorganic Chemistry.—Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. It is desirable, though not required, that students taking this course shall have taken elementary physics either in high school or in college. One lecture, two recitations, and three laboratory hours, throughout the year. 8 s.h. (W & E) STAFF

1-2. English Composition.—All Freshmen are required to take course 1 and course 2; however, those who earn a grade of "B" or more on the work of the first semester may in the spring substitute course 4 for course 2.

Students in courses 1 and 2 who fail to earn an average grade of "C" on the work of both semesters and at least a grade of "C" on the work of the spring term are required to do the work of English 53 during their Sophomore year. Those who do not earn a grade of "D" during the first semester are required to repeat during the spring course 1; if they earn a grade of "D" or more at the end of the spring semester, they receive credit for the first half-year of work, and during their Sophomore year they are required to do the work of English 2. Students whose grades for both semesters fall below "D" must repeat the entire course during their second year. 6 s.h. (E & W) STAFF

53. English Composition.—A second course in composition for Sophomores. 3 s.h. *Repeated in the second semester.* (W & E) STAFF

9-10. Engineering Mathematics.—This course, given for Engineering Freshmen and other students who desire to take more than six hours of mathematics in their Freshman year, includes college algebra, plane trigonometry, and plane and solid analytic geometry. 10 s.h. (E) STAFF

59. Differential Calculus.—*Each semester.* Prerequisite: course 9-10, or equivalent. 4 s.h. (W & E) STAFF

60. Integral Calculus.—*Each semester.* Prerequisite: course 59. 4 s.h. (W & E) STAFF

131. Differential Equations.—A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. Prerequisite: course 60. 3 s.h. (W) STAFF

17-18. Engineering Physics.—A course covering the field of general physics with emphasis on fundamental principles. Open only to engineering students. 6 s.h. (E) ASSISTANT PROFESSOR MOUZON; DRs. BONNER AND HEBB

57-58. Engineering Physics.—This course is a continuation of Physics 17-18 open to engineering students upon satisfactory completion of 17-18. Two lectures (E) and one three-hour laboratory (W) each week. 6 s.h.

ASSISTANT PROFESSOR MOUZON; DRs. BONNER AND HEBB

51-52. Principles of Economics.—For Sophomores. 6 s.h. (W & E) STAFF

PARTIAL LIST OF RECOMMENDED ELECTIVE SUBJECTS

103. (Economics) Transportation.—Essential features, problems, and competitive positions of rail, highway, water, and air transportation. Special attention is devoted to valuation, rates, and regulation as applied to railway transportation. Collateral reading and the preparation of papers are required. *For Juniors and Seniors.* 3 s.h. (W) ASSISTANT PROFESSOR LANDON

105. (Economics) Industrial Management and Business Forecasting.—A study of the organization and management of industry, with emphasis upon the business applications of the principles developed. Problems of interrelations of functions operating in the several fields of management, such as production control, personnel, and the forecasting of business conditions. *For Juniors.* 3 s.h. (W) DR. KEECH

115. (Economics) Economic Geography.—*This course is not open to students who have received credit for Economics A.* The study of the interrelation of human activities and environmental elements. The discussion embraces location, maps and their interpretation, the major climatic regions, seasonal influences, weather, lands and their uses, soils and minerals, bodies of water, plants, animals, and the work of man as environmental factors. 3 s.h. (E) ASSISTANT PROFESSOR LEMERT

57-58 (Economics) First-Year Accounting.—Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods will be assigned. **6 s.h. (w)** STAFF

138 (Economics) Business Statistics.—A year's course in elementary statistics designed principally for students of economics and business administration. The material is also of interest to those specializing in engineering, forestry, political science, sociology, and other subjects. The first term is devoted to a study of statistical methods; the second term, to application of these methods. Very little algebra and no higher mathematics are required. Offered both semesters. **3 s.h.**

PROFESSOR SMITH AND ASSOCIATE PROFESSOR BERRY

181-182. (Economics) Business Law.—The fundamental principles of law as applied to common business transactions. The topics presented are: contracts, agency, bailments, sales, negotiable instruments, partnerships, corporations, and bankruptcy. Textbook: Bays, *Business Law*. Casebook: Bays, *Cases on Commercial Law*. **6 s.h. (w)** ASSISTANT PROFESSOR SPRINGER

151. (English) Public Speaking.—A course in the fundamentals of public speaking with emphasis upon the effective presentation of ideas. **3 s.h. (w)** ASSISTANT PROFESSOR HERRING AND MR. LEWIS

152. (English) Argumentation.—A course dealing with the principles of argumentation and debating with special emphasis upon brief-making and practice-speaking. Public questions are studied as parallel work. **3 s.h. (w)** ASSISTANT PROFESSOR HERRING AND MR. LEWIS

103. (Botany) General Bacteriology.—Laboratory and lectures. **4 s.h. (w)** First semester. **(E)** Second semester. PROFESSOR WOLF

51. General Geology.—This course is designed to give a general view of the surface features of the earth, their origin, structure, and materials. Illustrative materials are studied in the laboratory. Excursions are made to neighboring points where the principles of the science are studied in the field. Three one-hour lectures or recitations and one three-hour laboratory. **4 s.h. (w)** ASSOCIATE PROFESSOR BERRY

52. General Geology.—This course is designed to give some knowledge of the chief events of the earth's history. Excursions will be made to suitable neighboring localities. Three one-hour lectures or recitations and one three-hour laboratory. Prerequisite: Geology 51. **4 s.h. (w)** ASSOCIATE PROFESSOR BERRY

51-52. History of Art.—The survey course for upperclassmen treats each art as a unit, relating it to its background and its companion arts wherever possible, but leaving many of the problems of correlation to the initiative of the student. The development of architecture is considered in course 51, the development of sculpture and painting in course 52. Courses 51 and 52 are both offered each semester. Credit for a single semester will be given only to Seniors electing it during their last semester. The courses are not open to Freshmen or to students who have had course 1-2. **6 s.h. (w & e)**

51, ASSISTANT PROFESSOR HALL; 52, ASSISTANT PROFESSOR McDONALD

FEES AND EXPENSES

The following tables show the general fees and charges collected from all students and the special fees collected from those taking courses in the sciences and in history. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

GENERAL FEES

Matriculation, per semester.....	\$ 25.00
Tuition, per semester.....	100.00
Room-rent—See the detailed statement that follows.	
Athletic Fee, admitting students to all athletic contests held on the University grounds, per semester.....	5.00
Damage Fee, payable annually at the time of first registration.....	1.00
Medical Fee, per semester.....	5.00
Library Fee, per semester.....	5.00
Commencement Fee, payable annually at the beginning of the second semester	3.00
Publication Fee:	
First semester.....	2.50
Second semester.....	3.00
Diploma Fee, payable by candidates for degrees at the beginning of the second semester, refunded if the diploma is not awarded.....	5.00
Tuition, Registration, Room-rent, Summer Surveying S10.....	26.00

LABORATORY AND MATERIALS FEES

Botany 1, 2, 52, 55, 104, 202, 204, 221, 255, and 256.....	\$ 2.50
Botany 51, 103, 151, 156, 203, 216, and 252.....	5.00
Forest Botany 224 and 253.....	2.50
Chemistry 1, 2, 61, 70, 81, 142, 153, 154, 215, 216, 231, 232, 260, 261, and 262.....	7.00
Chemistry 151, 152, 241, 242, 253, and 254.....	8.50
Education 1, 58, 68, and 101.....	1.00
Education 112, 115, 116, 122, and 131.....	7.50
Education 208 (for testing materials in lieu of text).....	2.50
Engineering	
Civil S10 and S110—See <i>Summer School Bulletin</i> .	
Civil 11, 107, 111, 112, 113, 114, 117, 118, 119, 123, 124, 143, 144, and 240.....	2.00
Electrical 153, 154, 161, 162, 163, 258, 261, 262.....	2.00
Mechanical 86, 189, 190, 193, 194, 199, and 200.....	2.50
Forestry 224, 253, 254, 259, 260, 264, 357a, and 358a.....	2.50
Forestry 261, 351, 352, 357b, 358b.....	2.50 to
Geology 51, 52, 101, 151, and 152.....	2.50
Geology 102.....	5.00
Field trip in Geology 51-52 and 101-102 at cost.	

History 91 and 92.....	3.00
No texts are required in these courses, but a fee of \$3.00 is charged, and books are placed in the Library for the use of those taking the courses. This fee is payable at the beginning of the semester and is collected through the office of the Treasurer of the University.	
Physics 1 and 2.....	2.00
Physics 57, 58, 104, 205, 206, 215, 216, 217, and 218.....	3.00
Physics 51-52, and 106.....	5.00
Zoology 1, 2, 92, 161, 174, 204, 219, 220, 222, 306, 324, and 343.....	3.00
Zoology 53, 151, 156, 224, 229, 303, and 321.....	5.00
Zoology, all other advanced laboratory courses.....	3.00

ESTIMATED EXPENSES FOR AN ACADEMIC YEAR

The necessary expenses of a student are moderate; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum of cost, while all charges made by the University have been kept low. Incidental expenses depend naturally upon the tastes and habits of the individual, but the actual necessary college expenses for one year, including board, room-rent, and such University fees as tuition, matriculation, commencement, library, damage, and medical, vary from \$574.50 to \$639.50. Books and laundry are not included in these figures, nor an estimated cost of \$20.00 to \$25.00 for drawing equipment.

The Athletic and Publication fees, also included in the above figures, while not essentially University fees, are at the request of the students collected by the Treasurer of the University as designated above. The proceeds of these fees are turned over to these distinct and separate student activities. The Athletic Fee entitling the holder to admission to all athletic contests held on the University grounds is collected from all regularly enrolled students. The Publication Fee pays for a blanket subscription to the semiweekly student newspaper, the monthly student magazine, and the student yearbook. With all undergraduates this charge is compulsory, but in the case of graduate students it is optional.

DORMITORIES

The regular fee for room-rent in the Southgate Building, set aside for engineering students, is \$50.00 per semester (two in a room).

Rooms in Epworth Hall, East Campus, are open to men students for a rental of \$30.00 per student, per semester.

Rooms are reserved only for applicants who have been officially accepted by the University, upon application to the Director in the Business Division, College Station, Durham, North Carolina. A reservation fee of \$25.00 must accompany the application for a room. The reservation fee is deducted from the room charges at the time of registration for the fall semester. An applicant who is accepted and has a room reserved is not entitled to a refund of the reservation fee unless the request is made on or before August 1.

A resident student in order to retain his room for the succeeding year is requested to make application accompanied by a reservation fee of \$25.00 between April 15 and May 15 at the office of the Director in the

Business Division. All rooms which have not been reserved on or before May 15 will be considered vacant for the succeeding year and will be reserved in the order in which applications are made.

Rooms are rented for no shorter period than one semester, or in the case of a medical student, one quarter, unless by special arrangement with the Director in the Business Division. A period of occupancy other than a semester or quarter and without special arrangement will be charged at a minimum rate of \$1.00 each day.

The authorities of Duke University do not assume the responsibility of selecting and assigning roommates, though they will gladly render any assistance possible.

BOARDING ACCOMMODATIONS

It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed an average of \$25.00 per month.

LAWS REGULATING PAYMENTS

The Executive Committee of the Trustees of Duke University has enacted the following regulations, which govern the payment of all fees due the University:

1. The President and the Treasurer of the University have no authority to suspend, or in any way alter, these regulations.

2. Matriculation and tuition fees are never refunded.

3. Any student who has failed to pay his bills on the dates advertised in the catalogue is denied the right to attend classes until his account is settled in full.

4. No student is considered by the Faculty as an applicant for graduation until he has settled with the Treasurer for all of his indebtedness to the University.

5. No student who has not settled all his bills with the Treasurer of the University is allowed to stand the mid-year or final examinations of the academic year.

When a student wishes his bills sent to his parent or guardian, the student or his parent or guardian must so notify the Treasurer of the University in writing in due time, but this in no way releases the student from liability to established penalties if his bills are not paid on the dates advertised.

TRANSCRIPTS

Students desiring to transfer from Duke University to another institution are entitled to one transcript of their record. A charge of \$1.00 is made for each additional copy.

ENGINEERING ORGANIZATIONS AND FRATERNITIES

American Institute of Electrical Engineers; American Society of Civil Engineers; American Society of Mechanical Engineers; Delta Epsilon Sigma (Honorary Engineering Fraternity); The Engineers' Club.

VOLUME 12

March, 1940

NUMBER 5

BULLETIN OF DUKE UNIVERSITY

The Summer School



1940

FIRST TERM: JUNE 12-JULY 23

SECOND TERM: JULY 25-SEPTEMBER 3

ANNOUNCEMENT

JUNALUSKA SCHOOL OF RELIGION
(AFFILIATED WITH DUKE UNIVERSITY)

PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL BULLETINS

FOR GENERAL BULLETIN of Duke University apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY

SUMMER SCHOOL
ANNOUNCEMENT



1940

FIRST TERM: JUNE 12-JULY 23

SECOND TERM: JULY 25-SEPTEMBER 3

ANNOUNCEMENT

JUNALUSKA SCHOOL OF RELIGION
(AFFILIATED WITH DUKE UNIVERSITY)

DURHAM, NORTH CAROLINA
1940

SUMMER SCHOOL ANNOUNCEMENT

ADMINISTRATIVE OFFICERS

WILLIAM PRESTON FEW, A.B., A.M., LL.D.,
PRESIDENT OF DUKE UNIVERSITY

ROBERT LEE FLOWERS, A.M., LL.D.,
VICE-PRESIDENT OF DUKE UNIVERSITY AND MEMBER OF THE FACULTY
COMMITTEE ON THE SUMMER SCHOOL

WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D.,
VICE-PRESIDENT OF DUKE UNIVERSITY AND MEMBER OF THE FACULTY
COMMITTEE ON THE SUMMER SCHOOL

HOLLAND HOLTON, A.B., J.D.,
DIRECTOR OF THE SUMMER SCHOOL AND CHAIRMAN OF THE FACULTY
COMMITTEE ON THE SUMMER SCHOOL

ARTHUR MARCUS PROCTOR, A.B., A.M., Ph.D.,
ASSOCIATE DIRECTOR OF THE SUMMER SCHOOL

WILLIAM THOMAS LAPRADE, A.B., Ph.D.,
MEMBER OF THE FACULTY COMMITTEE OF THE SUMMER SCHOOL

CALVIN BRYCE HOOVER, A.B., Ph.D., Litt.D.,
DEAN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES

ALICE MARY BALDWIN, A.B., A.M., Ph.D.,
DEAN OF THE WOMAN'S COLLEGE

WALTER KIRKLAND GREENE, A.B., A.M., Ph.D.,
DEAN OF UNDERGRADUATE INSTRUCTION

MARY GRACE WILSON, A.B.,
SOCIAL DIRECTOR AND ACTING DEAN OF WOMEN

FLORA MARIE MEREDITH, A.B., A.M.,
(Dean of Women, Hendrix College, Arkansas),
ASSISTANT DEAN OF WOMEN (in charge of East Campus)

KESTLER, MARY IRENE, A.B., A.M.,
SOCIAL DIRECTOR AND ACTING DEAN OF WOMEN (Second Term)

FACULTY

ADAMS, DONALD KEITH; A.B., Pennsylvania State College; A.M., Harvard;
Ph.D., Yale; PSYCHOLOGY (Duke University).

BERRY, EDWARD WILLARD; A.B., Ph.D., Johns Hopkins; GEOLOGY (Duke University).

BIGELOW, LUCIUS AURELIUS; B.S., Massachusetts Institute of Technology;
Ph.D., Yale; CHEMISTRY (Duke University).

BIRD, HAROLD CRUSIUS; Ph.B., C.E., Yale; CIVIL ENGINEERING (Duke University).

BLACKBURN, WILLIAM MAXWELL; A.B., Furman; B.A., M.A., Oxford; Yale,
1921-22, 1930-31; ENGLISH (Duke University).

BLOMQUIST, HUGO LEANDER; B.S., University of Chicago; Pasteur Institute,
1919; Ph.D., University of Chicago; BOTANY (Duke University).

- CANNON, JAMES, III; A.B., Duke; A.M., Princeton; Th.B., Th.M., Princeton Theological Seminary; Edinburgh University, 1919; Garrett, 1924; D.D., Birmingham-Southern College; RELIGION (Duke University).
- CARLITZ, LEONARD; A.B., Ph.D., University of Pennsylvania; MATHEMATICS (Duke University).
- CARR, JOHN WINDER, JR.; A.B., Duke; A.M., Ph.D., Columbia; EDUCATION (Duke University).
- CARROLL, EBER MALCOLM; A.B., A.M., Ph.D., University of Michigan; HISTORY (Duke University).
- CHILDS, BENJAMIN GUY; A.B., A.M., University of Virginia; University of Virginia, 1921-22; EDUCATION (Duke University).
- CLYDE, PAUL HIBBERT; A.B., A.M., Ph.D., Stanford; HISTORY (Duke University).
- COWPER, FREDERICK AUGUSTUS GRANT; A.B., A.M., Trinity College (Conn.); University of Strassburg, 1906-07; University of Geneva, 1907-08; Ph.D., University of Chicago; FRENCH (Duke University).
- CUNNINGHAM, BERT; B.S., M.S., Illinois Wesleyan; A.M., Duke; Ph.D., University of Wisconsin; ZOOLOGY (Duke University).
- ELLIOTT, WILLIAM WHITFIELD; B.A., Hampden-Sydney College; M.A., University of Kentucky; Ph.D., Cornell; MATHEMATICS (Duke University).
- ELLWOOD, CHARLES ABRAM; Ph.B., Cornell; Ph.D., University of Chicago; LL.D., Bethany College; SOCIOLOGY (Duke University).
- GARDINER, ANN HENSHAW; R.N.; Grad. Shepherd Normal School (W. Va.); B.S., Columbia; University of Washington Medical School of Hygiene, 1924-25; M.S., Kansas State College; HYGIENE (Duke University).
- GERGEN, JOHN JAY; A.B., A.M., University of Minnesota; Ph.D., Rice Institute; MATHEMATICS (Duke University).
- GILBERT, ALLAN H.; B.A., Cornell; A.M., Yale; Ph.D., Cornell; ENGLISH (Duke University).
- GOHDES, CLARENCE; A.B., Capital; A.M., Ohio State University; A.M., Harvard; Ph.D., Columbia; ENGLISH (Duke University).
- GRAY, IRVING EMERY; B.S., Massachusetts State College; M.S., Ph.D., University of Wisconsin; ZOOLOGY (Duke University).
- HALL, FRANK GREGORY; A.B., Milton College; A.M., Ph.D., University of Wisconsin; ZOOLOGY (Duke University).
- HALL, WILLIAM HOLLAND; A.B., A.M., Duke; B.C.E., University of Michigan; M.S.C.E., University of Wisconsin; ENGINEERING (Duke University).
- HUBBELL, JAY BROADUS; A.B., University of Richmond; A.M., Harvard; Ph.D., Columbia; ENGLISH (Duke University).
- IRVING, WILLIAM HENRY; B.A., Mt. Allison University; B.A., M.A., Oxford; Ph.D., Harvard; ENGLISH (Duke University).
- JORDAN, BRADY RIMBEY; Litt.B., Princeton; Ph.D., University of Wisconsin; FRENCH (Duke University).

- KRUMMEL, CHARLES ALBERT; Ph.B., Central Wesleyan College; Ph.M., Syracuse; Ph.D., University of Wisconsin; University of Marburg, 1910; GERMAN (Duke University).
- LANNING, JOHN TATE; A.B., Duke; A.M., University of California; University of London, 1926-27; Ph.D., University of California; HISTORY (Duke University).
- LAPRADE, WILLIAM THOMAS; A.B., Washington Christian College; Ph.D., Johns Hopkins; HISTORY (Duke University).
- LUNDEBERG, OLAV K.; A.B., St. Olaf College; A.M., Ph.D., University of Minnesota; Université of Montpellier, 1918; Centro de Estudios Históricos, Madrid, 1929; SPANISH (Duke University).
- MAUGHAN, WILLIAM; B.S., University of Minnesota; M.F., Yale; FORESTRY (Duke University).
- MITCHELL, FRANK KIRBY; A.B., Millsaps; A.M., University of Michigan; Oriel College, Oxford, 1921-24; ENGLISH (Duke University).
- MYERS, HIRAM EARL; A.B., Duke; S.T.B., S.T.M., Boston University; RELIGION (Duke University).
- NIELSEN, WALTER MCKINLEY; B.S., Ph.D., University of Minnesota; PHYSICS (Duke University).
- PATTON, LEWIS; A.B., Furman; Ph.D., Yale; ENGLISH (Duke University).
- PEARSE, ARTHUR SPERRY; B.S., A.M., University of Nebraska; Ph.D., Harvard; ZOOLOGY (Duke University).
- PROCTOR, ARTHUR MARCUS; A.B., Duke; A.M., Ph.D., Columbia; EDUCATION (Duke University).
- RANKIN, ROBERT STANLEY; A.B., Tusculum College; A.M., Ph.D., Princeton; POLITICAL SCIENCE (Duke University).
- RANKIN, WILLIAM WALTER; B.E., North Carolina State College of Agriculture and Engineering; A.M., University of North Carolina; Harvard, 1914-15; Columbia, 1919-21; MATHEMATICS (Duke University).
- SCATES, DOUGLAS EDGAR; A.B., Whitworth; Ph.D., University of Chicago; EDUCATION (Duke University).
- SCHUMACHER, FRANCIS X.; B.S., University of Michigan; FORESTRY (Duke University).
- SMITH, HILRIE SHELTON; A.B., Elon College; Ph.D., Yale; D.D., Defiance College; RELIGIOUS EDUCATION (Duke University).
- SPENGLER, JOSEPH JOHN; A.B., A.M., Ph.D., Ohio State University; ECONOMICS (Duke University).
- THOMAS, JOSEPH MILLER; A.B., Ph.D., University of Pennsylvania; MATHEMATICS (Duke University).
- WALTON, LORING BAKER; A.B., Princeton; Harvard, 1917-18; Lic. ès L., Sorbonne; FRENCH (Duke University).
- WEBB, ALBERT MICAHAH; A.B., A.M., Yale; Sorbonne (Paris) and Madrid, 1907-08; Sorbonne, 1923; FRENCH (Duke University).

- WILSON, ROBERT NORTH; A.B., Haverford College; M.S., University of Florida; Harvard, 1905-06; University of Illinois, 1923-24; Yale, 1931-32; CHEMISTRY (Duke University).
- WILSON, ROBERT RENBERT; A.B., Austin College; A.M., Princeton; Ph.D., Harvard; POLITICAL SCIENCE (Duke University).
- ZENER, KARL EDWARD; Ph.B., University of Chicago; A.M., Ph.D., Harvard; National Research Fellow in Psychology, University of Berlin, 1926-27; PSYCHOLOGY (Duke University).
- ADDOMS, RUTH MARGERY; A.B., A.M., Wellesley College; Ph.D., University of Wisconsin; BOTANY (Duke University).
- ALLEN, DONALD CAMERON; A.B., University of Illinois; A.M., Washington University; Ph.D., University of Illinois; ENGLISH (Duke University).
- AYCOCK, THOMAS MALCOLM; B.S., Oklahoma State College; M.S., University of Iowa; HEALTH EDUCATION (Duke University).
- BLACK, MARTIN LEE, JR.; A.B., Duke; M.B.A., Northwestern; C.P.A., Illinois and North Carolina; ACCOUNTING (Duke University).
- BOND, GEORGE WILLIAM; B.S., University of Arkansas; A.M., University of Chicago; Ph.D., Columbia; EDUCATION (Southeastern Louisiana College).
- BRIDGERS, FURMAN ANDERSON; A.B., Duke; A.M., University of Chicago; University of Chicago, 1928-29, 1933; FRENCH (Duke University).
- BROWN, HERBERT R.; B.S., Lafayette College; A.M., Harvard; Ph.D., Columbia; ENGLISH (Bowdoin College).
- CALLCOTT, WILFRID HARDY; A.B., Southwestern; A.M., Ph.D., Columbia; HISTORY (University of South Carolina).
- CARPENTER, DAVID WILLIAMS; A.B., A.M., Ph.D., Duke; PHYSICS (Duke University).
- CURTIS, KADER RANDOLPH; B.A., Wake Forest College; M.Ed., Duke; EDUCATION (Superintendent of Wilson County Schools).
- DAVIS, GIFFORD; A.B., Bowdoin College; A.M., Ph.D., Harvard; SPANISH (Duke University).
- DOLCH, EDWARD WILLIAM; A.B., Washington University; A.M., University of Wisconsin; Ph.D., University of Illinois; EDUCATION (University of Illinois).
- EASLEY, HOWARD; A.B., Union University, Tenn.; A.M., Ph.D., George Peabody College; EDUCATIONAL PSYCHOLOGY (Duke University).
- EITEMAN, WILFORD J.; A.B., A.M., Ohio Wesleyan University; Ph.D., Ohio State University; ECONOMICS (Duke University).
- ELLIS, HAROLD MILTON; B.A., M.A., University of Maine; A.M., Ph.D., Harvard; ENGLISH (University of Maine).
- EVANS, JAMES WALTER; B.S., M.S., Kansas State Teachers College; Ph.D., University of Iowa; EDUCATION (Director of Instruction and Research, St. Joseph, Mo., Schools).
- FOWLKES, JOHN GUY; A.B., Ouachita College; A.M., Ph.D., Columbia; EDUCATION (University of Wisconsin).

- GAMBLE, GUY C.; B.S., Ph.D., Columbia; EDUCATION (Economic Consultant, T. N. E. C., Federal Trade Commission, Washington, D. C.).
- GODARD, JAMES McFATE; A.B., Park College; A.M., Duke; Duke, 1930-31, 1932-36; EDUCATION (Queens College).
- GOLDTHORPE, J. HAROLD; A.B., Hamline University; A.M., Ph.D., University of Minnesota; EDUCATION (Research Staff, American Council on Education).
- GRIGGS, EARL LESLIE; B.A., University of Colorado; A.M., Columbia; Ph.D., University of London; ENGLISH (University of Pennsylvania).
- GWYNN, JOHN MINOR; A.B., A.M., University of North Carolina; Ph.D., Yale; EDUCATION (University of North Carolina).
- GWYNN, PRICE HENDERSON, JR.; A.B., A.M., University of North Carolina; B.D., Yale Divinity School; Ph.D., Yale; EDUCATION (Davidson College).
- HART, JAMES; A.B., A.M., University of Virginia; Ph.D., Johns Hopkins University; POLITICAL SCIENCE (University of Virginia).
- HAUSER, CHARLES ROY; B.S., M.S., University of Florida; Ph.D., University of Iowa; CHEMISTRY (Duke University).
- HAWKES, EVELYN JONES; A.B., A.M., Duke; Ph.D., University of Pennsylvania; SECONDARY EDUCATION (New Jersey College for Women).
- HIGHSMITH, JOHN HENRY; A.B., A.M., Duke; Columbia, 1904-06; LL.D., Catawba College; D.Ed., Wake Forest College; PUBLIC SCHOOL ADMINISTRATION (Director, Division of Instructional Service, North Carolina State Department of Public Instruction).
- HILLMAN, JAMES ELGAN; B.Ped., Berea College; B.S., A.M., Ph.D., George Peabody College; EDUCATION (Director of Professional Service, North Carolina State Department of Public Instruction).
- HOLSOPPLE, JAMES QUINTER; B.S., Ph.D., Johns Hopkins; National Fellow, Johns Hopkins; EDUCATIONAL PSYCHOLOGY (Chief Psychologist, New Jersey State Hospital).
- HOWARD, GEORGE; A.B., Davidson College; A.M., Ph.D., Columbia; EDUCATION (Supervisor Secondary School, Panama Canal Zone).
- HUGHES, MERRITT YERKES; A.B., Boston University; M.A., Edinburgh University; Ph.D., Harvard; ENGLISH (University of Wisconsin).
- HURLEY, LEONARD BURWELL; A.B., A.M., Duke; University of Chicago; Columbia, 1922; Ph.D., University of North Carolina; ENGLISH (Woman's College of University of North Carolina).
- JERNIGAN, CHARLTON CONEY; A.B., A.M., Ph.D., Duke; GREEK LITERATURE (Womans College of University of North Carolina).
- LEMERT, BEN FRANKLIN; B.S.E., M.S., Ohio State University; Ph.D., Columbia; ECONOMICS (Duke University).
- LOWERY, MILLARD LESLIE; A.B., A.M., Denison College; A.M., Columbia; Ph.D., University of Pennsylvania; EDUCATION (Superintendent of Middlesex County, N. J., Schools).
- MABBOTT, THOMAS OLLIVE; A.B., Ph.D., Columbia; ENGLISH (Hunter College).
- MABRY, WILLIAM ALEXANDER; A.B., A.M., Duke; A.M., Harvard; Ph.D., Duke; HISTORY (Mount Union College).

- MANCHESTER, ALAN KREBS; A.B., Vanderbilt; A.M., Columbia; Ph.D., Duke; HISTORY (Duke University).
- MILES, EDWARD ROY CECIL; B.S., Georgia School of Technology; A.M., Harvard; Ph.D., Rice Institute; MATHEMATICS (Duke University).
- MOUZON, JAMES CARLISLE; A.B., Southern Methodist University; Ph.D., California Institute of Technology; PHYSICS (Duke University).
- NEWSOME, ALBERT RAY; A.B., University of North Carolina; A.M., Ph.D., University of Michigan; HISTORY (University of North Carolina).
- ODELL, CHARLES WATTERS; A.B., A.M., DePauw University; Ph.D., University of Illinois; EDUCATIONAL PSYCHOLOGY (University of Illinois).
- OOSTING, HENRY JOHN; A.B., Hope College; M.S., Michigan State College; Ph.D., University of Minnesota; BOTANY (Duke University).
- OVERN, ALFRED VICTOR; A.B., M.S., Ph.D., University of Minnesota; EDUCATION (University of North Dakota).
- OWSLEY, FRANK LAWRENCE; B.S., M.S., Alabama Polytechnic Institute; A.M., Ph.D., University of Chicago; HISTORY (Vanderbilt University).
- PRICE, GUY VAUGHAN; A.B., William Jewell College; A.M., University of Chicago; Ph.D., Duke; SOCIOLOGY (Teachers College of Kansas City).
- PUNKÉ, HAROLD HERMAN; B.S., M.S., University of Illinois; Ph.D., University of Chicago; EDUCATION (Georgia State Woman's College).
- QUYNN, WILLIAM ROGERS; A.B., A.M., University of Virginia; Ph.D., Johns Hopkins; SPANISH (Duke University).
- RATCHFORD, BENJAMIN ULYSSES; A.B., Davidson College; A.M., Ph.D., Duke; ECONOMICS (Duke University).
- REID, JOHN TURNER; A.B., A.M., Ph.D., Stanford University; SPANISH (Duke University).
- ROBERT, JOSEPH CLARKE; B.A., Furman; A.M., Ph.D., Duke; HISTORY (Duke University).
- ROBERTS, JOHN HENDERSON; A.B., Ph.D., University of Texas; National Research Fellow, University of Pennsylvania, 1929-30; MATHEMATICS (Duke University).
- SANDERS, CHARLES RICHARD; B.Ph., A.M., Emory University; Ph.D., University of Chicago; ENGLISH (Duke University).
- SAYLOR, JOHN HENRY; A.B., Southern Methodist University; A.M., Ph.D., Duke; CHEMISTRY (Duke University).
- SCOTT, JONATHAN FRENCH; A.B., A.M., Rutgers; Ph.D., University of Wisconsin; HISTORY (New York University).
- SHIELDS, JOHN HERMAN; A.B., A.M., University of Texas; Columbia, 1924-26; ACCOUNTING (Duke University).
- SLAY, RONALD JAMES; B.S., University of Mississippi; A.M., Ph.D., Columbia; TEACHING OF SCIENCE (East Carolina Teachers College).
- SMITH, CULVER HAYGOOD; A.B., Duke; A.M., Yale; Ph.D., Duke; HISTORY (University of Chattanooga).

- SOLVE, MELVIN T.; B.A., University of Oregon; Ph.D., University of Michigan; National University of Norway, Oslo, 1920-21; ENGLISH (University of Arizona).
- SPARGO, JOHN WEBSTER; A.B., Washington University; A.M., Ph.D., Harvard; Sheldon Traveling Fellow of Harvard, 1926-27, at University of Copenhagen; ENGLISH (Northwestern University).
- SPENCER, HAZELTON; A.B., Boston University; A.M., Ph.D., Harvard; ENGLISH (Johns Hopkins University).
- SPENCER, PAUL R.; A.B., University of Wisconsin; Ph.D., Columbia; EDUCATION (Principal of Central High School, Trenton, N. J.).
- STEPHENSON, WENDELL HOLMES; A.B., A.M., Indiana; Ph.D., University of Michigan; HISTORY (Louisiana State University).
- STRANG, RUTH M.; B.S., A.M., Ph.D., Columbia; EDUCATION (Columbia University).
- TANRUTHER, EDGAR M.; B.S., Iowa State College; M.A., Ph.D., University of Iowa; EDUCATION (State Teachers College, Minot, North Dakota).
- THOMPSON, EDGAR TRISTRAM; A.B., University of South Carolina; A.M., University of Missouri; Ph.D., University of Chicago; SOCIOLOGY (Duke University).
- WALLIN, JOHN EDWARD WALLACE; A.B., Augustana College; A.M., Ph.D., Yale; EDUCATIONAL PSYCHOLOGY (Director of Special Education and Mental Hygiene, Delaware State Department of Public Instruction).
- WARD, MORGAN; A.B., University of California; Ph.D., California Institute of Technology; MATHEMATICS (California Institute of Technology).
- WEST, ALFRED THURBER; B.S., Alabama Polytechnic Institute; A.M., University of Alabama; Teachers Certificate from American Academy of Dramatic Art; ENGLISH (Duke University).
- WHEAT, HARRY GROVE; A.B., West Virginia University; A.M., University of Chicago; Ph.D., Columbia; EDUCATION (West Virginia University).
- WILSON, FREDERICK ELIPHAZ; A.B., Oberlin College; A.M., Columbia; University of Leipzig, 1916-17; Harvard, 1922-23; GERMAN (Duke University).
- WOODY, ROBERT HILLIARD; Ph.B., Emory University; A.M., Ph.D., Duke; HISTORY (Duke University).
- YODER, FRED ROY; A.B., Lenoir-Rhyne College; A.M., University of North Carolina; Ph.D., University of Wisconsin; SOCIOLOGY (State College of Washington).
- BERRY, THOMAS SENIOR; S.B., A.M., Ph.D., Harvard; ECONOMICS (Duke University).
- BONNER, LYMAN GAYLORD; A.B., University of Utah; Ph.D., California Institute of Technology; PHYSICS (Duke University).
- BOOKHOUT, CAZLYN GREEN; A.B., St. Stephens College; A.M., Syracuse University; Ph.D., Duke; ZOOLOGY (Duke University).
- BRADSHAW, CHARLES KILGO; A.B., Duke; A.M., Ph.D., Harvard; CHEMISTRY (Duke University).

- BROWN, FRANCES; A.B., Agnes Scott College; Ph.D., Johns Hopkins; CHEMISTRY (Duke University).
- BRUINSMA, HENRY A.; B.M., M.M., University of Michigan; MUSIC (Duke University).
- CARPENTER, JAMES MADISON; A.B., A.M., University of Mississippi; Ph.D., Harvard; ENGLISH (Duke University).
- CLARK, THOMAS D.; A.B., University of Mississippi; M.A., University of Kentucky; Ph.D., Duke; HISTORY (University of Kentucky).
- CULBRETH, SARAH ELIZABETH; A.B., A.M., Ph.D., Duke; ZOOLOGY (Duke University).
- DOTY, ROY ANDERSON; A.B., A.M., Duke; Duke, 1938-40; EDUCATION (Duke University).
- DOW, NEAL; A.B., Kenyon College; A.M., Ph.D., University of Pennsylvania; FRENCH (Duke University).
- ESKRIDGE, THOMAS JOSEPH, JR.; A.B., Emory and Henry College; A.M., George Peabody College; Ph.D., Duke; EDUCATION (Lander College).
- GIBSON, WILLIAM MARION; B.A., University of Richmond; A.M., Ph.D., Duke; POLITICAL SCIENCE (Duke University).
- HAMILTON, WILLIAM BASKERVILLE; A.B., A.M., University of Mississippi; Ph.D., Duke; HISTORY (Duke University).
- HARWELL, GEORGE CORBIN; A.B., A.M., Ph.D., Duke; ENGLISH (Duke University).
- HEBB, MALCOLM HAYDEN; B.A., British Columbia; Ph.D., Harvard; PHYSICS (Duke University).
- HILL, DOUGLAS; A.B., Yale; A.M., Ph.D., Princeton; CHEMISTRY (Duke University).
- HOBBS, MARCUS EDWIN; A.B., A.M., Ph.D., Duke; CHEMISTRY (Duke University).
- JEFFERS, KATHERINE R.; A.B., A.M., University of Missouri; Ph.D., Bryn Mawr; ZOOLOGY (Duke University).
- JOHN, LENORE SUSAN; A.B., York College; A.M., University of Chicago; Chicago, 1927-30; ELEMENTARY EDUCATION (Specialist in Arithmetic, University of Chicago Laboratory School).
- JOHNSON, MYCHYLE W.; A.B., Ph.D., University of Indiana; ZOOLOGY (Duke University).
- KEECH, JAMES MAYNARD; A.B., A.M., Ph.D., Duke; ECONOMICS (Duke University).
- MCCLOY, SHELBY THOMAS; A.B., A.M., Davidson College; B.Litt., B.A., Oxford; Ph.D., Columbia; HISTORY (Duke University).
- MARKS, SALLIE BELLE; A.B., A.M., Columbia; George Washington University, 1938-39; ELEMENTARY EDUCATION (Meredith College).
- MICHAELS, MATILDA OSBORNE; A.B., Duke; A.M., Columbia; ELEMENTARY EDUCATION (Supervisor Durham County Schools).

- PORTER, ESTELLE RAWL; A.B., Winthrop College; Smith College, 1922-23; University of Chicago, 1926-27; ELEMENTARY EDUCATION (Queens College).
- PRATT, JOSEPH GAITHER; A.B., A.M., Ph.D., Duke; PSYCHOLOGY (Duke University).
- RAYMOND, MARY LOIS; A.B., Mount Holyoke College; A.M., Radcliffe College; University of Wisconsin, 1919-20; University of Madrid and University of Paris, 1921-22; School of International Studies, Geneva, 1928; FRENCH (Duke University).
- SIMPSON, WILLIAM HAYS; A.B., Tusculum College; A.M., Ph.D., Duke; POLITICAL SCIENCE (Duke University).
- WATSON, KARL BRANTLEY, JR.; B.S., A.B., University of Chattanooga; A.M., Ph.D., Duke; EDUCATION (Duke University).
- WELFLING, WELDON WOODROW; A.B., Swarthmore College; A.M., Ph.D., Princeton; ECONOMICS (Duke University).
- ABRAMOVITCH, BENJAMIN; B.S., McGill University; Duke, 1938-40; ASSISTANT IN CHEMISTRY (Duke University).
- ALSTON, AUGUSTA MICHAELS; A.B., Duke; DRAWING (Durham Public Schools).
- AYRES, ERLE BINGHAM; S.B., A.M., Boston University; ASSISTANT IN CHEMISTRY (Duke University).
- CHAMBERS, ROBERT LEE; B.S., University of Illinois; DIRECTOR OF RECREATION PROGRAM (Duke University).
- GOULD, ROBERT KENT; A.B., A.M., Duke; Duke, 1939-40; ASSISTANT IN CHEMISTRY (Duke University).
- HUDSON, BOYD E.; A.B., Duke; Duke, 1938-40; ASSISTANT IN CHEMISTRY (Duke University).
- MASON, MARY LOCHER; Diploma, Maryland Institute; Diploma in Fine Arts, Teachers College, Columbia; DRAWING (Durham City Schools).
- PERSONS, WALTER S.; SWIMMING (Duke University).
- RICHARDS, JAMES AUSTIN, JR.; A.B., Oberlin College; Duke, 1938-40; ASSISTANT IN PHYSICS (Duke University).
- RUSSELL, CHARLES DANIEL; B.S., Niagara University; M.S., California Institute of Technology; Duke, 1939-40; ASSISTANT IN CHEMISTRY (Duke University).
- WILLIAMS, JAMES WESLEY; A.B., Duke; B.S., Georgia School of Technology; ASSISTANT IN ENGINEERING (Duke University).
- WOLLMAN, SEYMOUR HORACE; B.S., M.S., New York University; Johns Hopkins University, 1936-39; Duke, 1939-40; ASSISTANT IN PHYSICS (Duke University).

DUKE UNIVERSITY SUMMER SCHOOL

Duke University, located at Durham, North Carolina, includes Trinity College, the Woman's College, the College of Engineering, the Graduate School of Arts and Sciences, the Schools of Religion, Law, Medicine, Nursing, and Forestry, and the Department of Education. The student body is drawn from the entire United States, with a representative group of foreign students. The summer enrollment is smaller than that of the regular year, but with a somewhat larger representation of graduate students.

In 1939 there was a total of 3,273 registrations in Duke University Summer School and affiliated schools. Of these registrations 1,933 students were enrolled in the first term of the Duke University Summer School, and 941 the second term; 141 were enrolled in the Junaluska Summer School, Inc., and Junaluska School of Religion at Lake Junaluska; and 158 were enrolled in the Medical School and the School of Nursing. There were 1,163 graduate students the first term, and 578 the second, admitted on the basis of Bachelor's degrees from 301 different colleges and universities. The total enrollment for the summer was drawn from thirty-five states, as well as the District of Columbia, Puerto Rico, Hawaii, Canada, England, China, and the Dominican Republic. The largest enrollments were from North Carolina, Pennsylvania, South Carolina, West Virginia, Florida, Georgia, Virginia, Ohio, Tennessee, New York, New Jersey, Mississippi, Maryland, Kentucky, and Alabama in the order named. Public school teachers from thirty-one states were included in the total.

CAMPUS AND BUILDINGS

Duke University is located on two campuses connected by prompt and inexpensive bus service. The Duke Forest is adjacent and easily accessible to the West Campus. Both campuses will be used by the Summer School of 1940. The West Campus will be used for the graduate students, both men and women, both terms, and for undergraduates the last six weeks. This campus, with its Tudor Gothic architecture, has all dormitories, laboratories, classroom buildings, auditorium, administration building, and the buildings of the professional schools conveniently grouped around the quadrangle dominated by the University Chapel. On one corner immediately beyond the Chapel is the General Library, the largest in the Southeast. Opposite the Library is the Union, center of student activities, one of the most complete buildings of its kind to be found in American institutions. In it are housed practically all the facilities needed in the general day-by-day round of student life, including a large social lobby, reading room, information office, alumni and news service headquarters, six dining rooms, reception rooms, headquarters for various student organizations, the government post office, the University store, a complete haberdashery, and a barbershop.

The East Campus, which during the academic year houses the Woman's College, will be used exclusively for undergraduates the first six weeks of Summer School. All undergraduate women will be housed on this campus, all undergraduate classes except in laboratory science (chemistry, physics, and zoology) and accounting will be held there, and books reserved for undergraduate courses will be reserved in the East Campus Library. The dining room and other facilities will be fully available for the use of undergraduate students the first six weeks. Southgate Dormitory, which during the academic year is used by the engineering students, will be reserved for undergraduate men the first six weeks.

CHANGES IN CALENDAR AND REGISTRATION: TWO TERMS

On account of the growth of the first term of Summer School, there will be no middle term for the summer of 1940. Apparently the first-term registration will fill both dormitories and classrooms without making possible any registrations for the middle term.

Since the middle term has been discontinued, the first term instead of beginning Wednesday following the first Sunday in June will begin Wednesday, June 12, thereby making it possible for students who register in advance to enter classes as late as Tuesday morning, June 18. Students who enter late, however, are marked absent from classes held prior to their entrance, and the student who has more than four absences cannot receive full credit for the term's work. The second term closes September 3. Since many students have found it exceedingly hard to complete twelve weeks' work in one term of Summer School, students are advised to register for only eleven weeks and take advantage of the early examinations closing August 27. This means that the student who enters the first term of Summer School and continues for five weeks of the last term, completes a full "summer quarter," or an exact one third of the year now required for a Master's degree (see "New Requirements for Master's Degrees"). *Students who wish to complete nine weeks of work instead of six may do so by registering for three weeks in Education or English beginning July 25.*

CALENDAR AND REGISTRATION

The first term of Summer School will open June 12 and close July 23. The second term will open July 25 and close September 3. Students who desire a summer "quarter" of eleven weeks to complete one third of a regular year's work, for example, one third of the work required for a Master's degree, can complete such work in the period from June 12 to August 27. All Mondays except July 1 and 22, and August 5 and 26 are holidays. July 4 will be observed as Independence Day.

For the first term, Tuesday, June 11, is registration day. Any students who have not previously registered by mail should be present at 9:00 A.M. and 2:00 P.M. to submit their credentials for admission, select courses, and make arrangements concerning board and lodging. Students arriving after 5:00 P.M. Tuesday will register the next morning at

8:30.* Regular classes will begin Wednesday morning at 8:00. Students will find schedule posted on the bulletin board prior to registration.

For the second term, Wednesday, July 24, is registration day, and classes will begin Thursday morning at 8:00.

AVAILABILITY OF ROOMS AT THE UNIVERSITY

Rooms rented from the University are not available until 9:00 A.M. the day of registration. Students arriving prior to that hour are expected to make temporary arrangements at the hotel or elsewhere. The Summer School, however, will be glad to co-operate to help students find desirable accommodations. It is usually possible to find temporary rooms near the campus for about one dollar per person per night. Special problems of this type should be taken up with the Director promptly. In rare cases, rooms for the second term will not be available until 2:00 P.M. registration day on account of late examinations scheduled for first-term students, but the Summer School can easily adjust conflicts of this type.

Room assignments are made with the understanding that the student is expected to vacate the room within twenty-four hours after his last examination. If his last examination begins at 8:00 o'clock Monday, he is expected to vacate the room by 8:00 o'clock Tuesday; if his last examination begins at 2:30 o'clock Tuesday, he is expected to vacate his room by 2:30 Wednesday; etc. In cases where the enforcement of this rule works hardship, temporary arrangement can probably be made, if the Housing Bureau is notified one week in advance.

ADMISSION

Applicants for admission must have completed a high-school course. As evidence of this, a teacher's certificate of grade as high as North Carolina elementary will be accepted from teachers with two or more years of experience. Certificates and other credentials must be submitted to the Committee on the Summer School by the time of registration. Each student who wishes to enroll for graduate credit should request the proper officer of the university or college he attended to send directly to the Dean of the Graduate School an official transcript of his undergraduate record and of any graduate credits he may have. This transcript should be furnished by May 25 for enrollment in the first summer session and by July 1 for enrollment in the second summer session. An application blank for admission to graduate courses is available upon request for those who contemplate study toward an advanced degree. Undergraduate students should apply to the Director of the Summer School for a special blank to be signed by the dean of the college to which they desire their credits sent, certifying approval of the courses for which application is made. The Summer School reserves the right to reject any application or to cancel any registration without assignment of reason.

* N.B.—Students who register late are regarded as absent from all classes held prior to their registration. Late registration very seriously affects credits that may be obtained.

CREDITS

Professional credits towards teachers' certificates are granted by the various state boards of education, each in accordance with its own carefully planned rules. Teachers should consult the rules laid down by their State Board of Education before enrolling for certification credit. Any student, however, whose work is of such quality as to deny him credit toward a degree, fails to receive "professional" credit.

College credits are offered as follows: A course of five hours a week for six weeks counts for two semester hours of credit, a course of seven and one half hours a week for six weeks counts for three semester hours of credit, and a course of ten hours a week for six weeks counts for four semester hours of credit in Duke University. No student is allowed to take more than fifteen hours of work a week without the consent of the Director and of the instructor in whose department the student expects to do his major work.* Except in the case of elementary laboratory science, in which eight semester hours may be completed in seven weeks, the University will not accept credit beyond six semester hours earned in one term toward the Bachelor's degree. Graduate students are not under any circumstances permitted to enroll for more than six semester hours in a summer school of six weeks. They forfeit graduate credit by undertaking more than six semester hours of work, even though part of the work may carry undergraduate credit only. A student of senior standing, however, may elect as many as eight semester hours of such elementary-skill work as drawing, public school music, and the like, or courses primarily for Freshmen and Sophomores, and obtain such professional credit as his State Department of Education will allow, not to exceed the maximum eight stated. The North Carolina State Department of Education disapproves of more than seven semester hours in one term of six weeks.

The nature of the credit allowed for each course is indicated by the number of the course. Courses numbered 1-49 are primarily for Freshmen, or Freshmen and Sophomores; courses numbered 50-99 are ordinarily for Sophomores, or Sophomores and Juniors; courses numbered 100-199 are for Juniors and Seniors; courses numbered from 200-299 are for Seniors and graduates; and courses numbered from 300 up are for graduate students only and are of very limited enrollment. Courses numbered from 200 up are usually limited in enrollment to approximately twenty-five students, and during the summer consist almost exclusively of graduate students. Graduate seminars are limited to fifteen students or fewer.

EXAMINATIONS

The last two days of each term of six weeks are devoted to examinations. The University has no provisions for giving examinations *in absentia*, but students absent from examination for valid reason are permitted a liberal extension of time in which to return to the University for completion of credit.

* No student liable to suspension from the University under its rules regarding failure is permitted to enroll in the Summer School.

The early opening of schools in which many summer school students happen to teach, sometimes necessitates the return home of students before the end of the second term of Summer School. The provision made for such students is as follows: Any student whose record is superior in a given course may with the consent of his instructor and the approval of the Director of the Summer School obtain a special examination not earlier than the fifth day before the regularly scheduled examination. If he takes such examination, the total credit in each course is reduced by one sixth; in other words, the student is interpreted as having completed five weeks of Summer School, and his maximum allowable credit, therefore, is five semester hours.

SCHEDULE OF EXAMINATIONS UNDER THE NEW PLAN FOR THE MASTER OF EDUCATION DEGREE

For the first term, Master of Education examinations will be held as follows:

Tuesday, June 11 (registration day), 8 to 11 A.M. and 2 to 5 P.M., Room 210, School of Religion Building, examinations upon the students' minors. (All students expecting to stand this examination should file application before May 25, in order that the departments may be notified to prepare examinations.)

Wednesday, July 24 (registration day for second term), 8 A.M. to 12 M., Room 210, School of Religion Building, examination upon the professional major. (Only students who have completed their professional major will be permitted to stand examination at this time, and the same comment applies to the examination given toward the end of the second term.)

Thursday, July 25, 8 A.M. to 10:30 A.M., 11 A.M. to 12:50 P.M., and 2:15 to 5:45 P.M., examinations on the required reading courses. (Only those who have completed their required reading courses by the end of the first term of summer school will be eligible for this examination.)

Examinations for the second term of summer school will be given the same hours and place as follows:

Friday, July 26, examinations upon the students' minors. Students intending to take these examinations should apply to the Director of the Summer School before July 20.

Wednesday, August 28, examination upon the professional major.

Thursday, August 29, examination upon the required reading courses for those completing their reading the second term.

Except for the examinations on the minors, where longer advance notice is required, it will be sufficient to notify the Director three days before the date of the examination. No fee is required at the time that the examination is taken, but at the time of graduation the student pays one flat examination fee of \$25.00, equivalent to the thesis fee required of other Master's candidates.

NEW REQUIREMENTS FOR MASTER'S DEGREES

The Southern University Conference, consisting of leading educational institutions of the South interested in graduate work, has agreed that

Master's degrees in summer school should represent a full year of residence as the term residence is understood during that academic year, exclusive of holidays and other interruptions of the academic year. This means a minimum period of thirty-three weeks and has these effects among others:

1. The extended period (of thirty-three weeks instead of thirty) makes it possible to give students preparing to write Master's theses a better opportunity to prepare for their thesis writing. In some departments research courses in which the student may do certain elementary preliminary work on his thesis have already been provided.

2. The period of thirty-three weeks conveniently divides into three periods of eleven weeks each, making it possible for the Summer School to begin nearly a week later and give the student a full period of eleven weeks well before the last day of August. For some time it has been hard to work in a full period of twelve weeks without serious inconvenience to many students because of early entrance for the first term or getting away late from the last term. Under the new plan students are advised not to try more than eleven weeks (eleven semester hours of credit) in one summer. However, for those students working under the old rules who wish to obtain twelve weeks credit this summer, a full period of twelve weeks has been provided as announced in this bulletin. It is possible that the twelve weeks term will within the next year or two be abandoned in favor of the quarter of eleven weeks.

3. The extended period makes possible a revision of the Master of Education degree in such a way as to abolish the thesis requirement and substitute work of probably greater value to the student. The requirements of the new Master of Education degree are set forth in the following paragraphs. It will be observed that they are probably more difficult than the old requirements, but the good student will probably have more when he completes them than he would have had under the old requirements including a thesis.

Students who started Master's degrees under regulations enforced prior to 1938 will have the normal time in which to complete their degrees under the old plan. The new requirements are sufficiently different from the old to make it hard for students with more than twelve semester hours of credit under the old plan to transfer to the new without loss. Anyone who transfers will be responsible for a minimum of thirty-three semester hours, or a residence period of thirty-three weeks. (Under "Graduate Instruction," two pages further along in this bulletin, the details of the new requirements are set forth.) The principal changes in the requirements for the Master of Arts degree are the new minimum residence period of thirty-three weeks (five and one half terms of six weeks, or three "quarters" of eleven weeks), the more specific statement of undergraduate prerequisites (see the introductory statements under each department of instruction that offers a Master's sequence in Summer School), and the requirement in most departments of a pre-thesis research course, in which, however, the student will ordinarily have some oppor-

tunity to get a start upon his thesis. This, in effect, gives the student nine weeks of supervision for his thesis at the same time that it clears up the status of some of the research courses.

The changes in the Master of Education requirements are more radical. They not only require a minimum residence period of three "quarters" or five and one-half summer terms of six weeks, but they abolish the thesis requirement heretofore made and substitute the following work with final written examination upon each part:

(A) Four courses intended to help the student learn to read independently and obtain a basic understanding of education and the school, these courses being conducted on a plane analogous to Honors reading* and described as follows:

Education S300.—The place of educational research, its methods of procedure, evaluation of results, special problems, etc.

Education S304.—The school as an institution—the place of the school in society, its history, and philosophy.

Education S305.—The nature, function, and organization of the curriculum.

Education S317.—The psychological principles of education—an advanced study of teaching, learning, and the learner.

(B) The work of the minor department, including any undergraduate prerequisite the student finds it necessary to study by supervised outside reading. (For example, many teachers of history and social studies have not had undergraduate work in government or economics or sociology, yet they wish to take their minor work in this missing department in order that they may have a better background for their teaching. Under the new plan, the Summer School can encourage this desirable strengthening of preparation in the subject matter by giving reading lists based on the preliminary undergraduate work in order that the student may have the background to go on with the minor of his choice. It would seem that a teacher of American history, for example, can by independent reading and a minimum of supervision obtain the elementary knowledge of American government necessary as a basis for minor work. It is the policy of the Summer School to encourage through the Master of Education degree independent reading as a basis for the minor as well as for the four "core" courses listed above.)

(C) Carefully defined major work in (a) public school administration, (b) public school supervision, (c) elementary education, or (d) secondary education, as the professional major. (It will be observed that the degree is intended for those who definitely desire their work for professional purposes. The Master of Education degree is, therefore, not offered with a major in educational psychology or history of education. Students in these two fields would be expected to enroll for the Master of Arts degree.)

* Voluntary class attendance is permitted students enrolling in these courses for reading credit, except that such students are expected to report at least once in three days for discussion.

It is apparent that students in education are offered a choice between the Master of Arts degree with a major in education and the Master of Education degree. Either degree may be completed within a minimum residence of three summer "quarters" of eleven weeks each, or five and a half summer terms of six weeks each. Both degrees are administered by the Graduate School, and only graduate courses are approved for the degrees. Students who subsequently decide to go on to the Doctor of Philosophy degree may have their credits for either Master's degree evaluated toward the higher degree.

GRADUATE INSTRUCTION IN THE SUMMER SCHOOL

ADMISSION TO GRADUATE COURSES

A student who has received the A.B. or B.S. degree for a four-year undergraduate course may be admitted to take graduate courses in the Graduate School of Arts and Sciences of Duke University, provided his undergraduate record gives positive evidence of ability to undertake graduate study successfully. An average grade of not less than "B" is ordinarily accepted as evidence of such ability. A candidate for admission to graduate courses must instruct the proper official in the college(s) he attended to send directly to the Dean of the Graduate School an official transcript of his undergraduate record. In no case will a transcript presented by the candidate himself be accepted as a basis for admission, nor will a transcript mailed by any institution be returned to the student. An application blank for admission will be provided upon request to the Dean of the Graduate School.

Unless applications and transcripts are submitted to the Dean of the Graduate School by May 25 for enrollment in the first summer session or by July 1 for enrollment in the second summer session, there can be no assurance that action can be taken upon the application before the time of registration. In such a case the student might have to be enrolled as an unclassified student.

A student who has been admitted to graduate courses and who expects to work toward an advanced degree must consult with the Director of Graduate Studies or other designated representative of the department in which he proposes to major before registering for courses. This can be done at the time of registration in summer sessions. The department concerned will determine whether a student is prepared to take any particular course. In all cases the student must make up without credit toward a graduate degree all prerequisites required by the major department of candidates for advanced degrees. If the student meets the requirements for admission to the Graduate School, as explained below, the graduate courses he has taken prior to formal admission will count toward a higher degree, provided that they are in accord with the requirements of the Graduate School for the degree and are acceptable to the major department.

ADVANCED DEGREES

The degrees offered in the Graduate School of Arts and Sciences are Master of Arts (A.M.), Master of Education (M.Ed.), and Doctor of Philosophy (Ph.D.). Most of the departments of the University are now prepared to give a full program of work leading to the degree of Doctor of Philosophy.

ADMISSION TO THE GRADUATE SCHOOL

After twelve semester hours of graduate work, the student may apply for admission to the Graduate School, and thus become a candidate for the Master's degree. Such admission is dependent upon the fulfillment of two conditions.

(1) The student must have made a mark of "G" or "Good" in at least three

semester hours of work, with no mark less than "S."* Candidates who cannot meet this condition may at a later time submit their records for re-evaluation, provided that in their subsequent work they shall have made a substantial number of "G's." (2) The student in his undergraduate work must have met substantially the requirements for the A.B. or B.S. degree at Duke University. Any deficiencies of undergraduate work must be satisfied before admission to the Graduate School.

DEGREE OF MASTER OF ARTS

Language Requirements:

Candidates for the degree of Master of Arts are required either to have a reading knowledge of a foreign language, evidenced by examination or by transcript showing the completion of the third college year of the language, or to have a reading knowledge of French and German, evidenced by examination or by transcript showing the completion of second-year college French and college German.

The Summer School regularly offers courses in French and German for those students who wish to prepare to satisfy the requirement in either of these languages in this way.

Minimum Residence Requirements:

For graduate students who take more than fifteen semester hours for the Master's degree in the Summer School the minimum residence requirement is thirty-three semester hours of graduate credit. Graduate students may not receive more than six semester hours of credit for work taken in one summer session of six weeks. The degree of Master of Arts or Master of Education thus can be earned in six such summer sessions by students who are well prepared for graduate work, or by careful planning of thesis residence in a minimum of five and one half terms. Most students planning to complete a Master's degree within a series of summer schools should plan to spend six terms of six weeks each in residence.

All the work offered for the Master's degree, either in the regular academic year or in summer sessions, must be completed within a period of six years from the date of beginning. Graduate courses begun earlier than six years before the completion of the work for the degree will not count either toward residence or course credit requirements.

Major and Minor Subjects:

Before selecting his major in a department, a student must have completed a minimum of twelve semester hours of approved *preliminary* courses in that department and twelve additional semester hours either in that department or in related work. This minimum is imposed by the Graduate School Council. A majority of the departments of instruction require at least eighteen semester hours of undergraduate work, and a few require more. The student therefore should read carefully the special requirements listed by each department in the *Graduate* or the *Summer School Bulletin*.

Each candidate for the Master's degree must select a major subject, in which the minimum requirement is twelve semester hours and the thesis. A candidate must take six semester hours of graduate work in a minor subject approved by the major department, and the remaining nine semester hours in the major or minor subjects or in a department approved by the major department and by the Graduate School Council. All graduate students must take a minimum of six semester hours of work in courses numbered 300 or above unless excused therefrom by the Dean of the Graduate School on the

* The system of grading used in the Graduate School is as follows: "E," or "Exceptional"; "G," or "Good"; "S," or "Satisfactory." "S" is interpreted in terms of "percentage" grading as being at least ten points above the conventional undergraduate "pass" of 70. "G" is normally interpreted as indicating that the student receiving it has standing within the upper 25 per cent of a department's students considered over a period of years.

recommendation of the major department. No undergraduate course may be credited toward the degree of Master of Arts.

Thesis:

In the minimum residence requirement of thirty-three semester hours of graduate credit is included an allowance of six semester hours for a thesis. The title of the thesis required in partial fulfillment of the requirements for the degree of Master of Arts must be approved by the department concerned and filed with the Dean of the Graduate School on or before November 15 of the academic year in which it is expected that the degree will be conferred.

Four bound typewritten copies of each thesis must be submitted to the Dean of the Graduate School in approved form on or before May 15 of the year in which the degree is conferred. The thesis is passed upon and accepted or rejected by an examining committee of three members of the Faculty. Each candidate is required to appear before the committee for an oral examination on the thesis and major field.

CREDIT TOWARD THE MASTER'S DEGREE FOR WORK DONE ELSEWHERE

No credit toward advanced degrees is given for university extension or correspondence courses.

Not more than six semester hours of credit toward the Master's degree may be given to graduates of Duke University or of other approved colleges or universities for acceptable graduate courses or research work completed elsewhere. Such credit will not shorten the minimum period of full-time resident study required at Duke University.

SUGGESTED PROGRAM OF WORK TOWARD THE MASTER'S DEGREE

A committee of the Graduate School Council has drafted the following recommendations respecting the student's program of work toward the Master's degree:

First term: two courses in the major department, usually from numbers 200 to 299.

Second term: one course in the major department, and one course in the minor department, or two courses in the minor department.

Third term: one course in the major department or one course in the minor department, and a general course in research methods if such a course is offered by the major department. A thesis subject should be tentatively selected and filed with the signed approval of a professor willing to supervise it, and the head of the major department (or the approved representative of the major department in charge of summer school work) before the beginning of the third week of the third term.

Fourth term: one course in the major department or remaining course in the minor department (if for any reason there is a remaining course in the minor). The remaining time of the fourth term should be spent in provisional work upon the thesis under at least preliminary supervision of the major professor. The filing of the title in the Graduate Office should be made permanent.

Fifth term: one course in the major department, and half time devoted to the thesis under the active supervision of the major professor.

Sixth term: same as the fifth.

This plan will require eighteen semester hours of work in the major department and six in the minor department, as were required by the former rules, plus a course in research methods in the major department (or substitution elsewhere provided below) and will allow one half of the student's time for three summer terms to be devoted to his thesis work. By approval of the department and of the Dean of the Graduate School, the minor work may be enlarged at the expense of the work in the major department. If

the major department does not offer a generalized course in research methods, some other course numbered 300 or above either in the major or minor department may be substituted with the approval of the Dean of the Graduate School.

DEGREE OF MASTER OF EDUCATION

The degree of Master of Education is granted to teachers, or others engaged in educational service, upon completion of the prescribed program of study. Candidates for the degree must have had two years of practical experience in teaching when the degree is conferred. This experience may be obtained in the two years immediately prior to entering upon candidacy for the degree, or it may be obtained concurrently with the period of study for the degree.

A preliminary requirement for admission to candidacy for this degree is the completion of a minimum of eighteen semester hours of approved undergraduate work in education, including work in educational psychology and in history of education, educational sociology, or school administration. Three hours of general psychology may be counted as contributing toward these prerequisites.

Beginning in the summer of 1938, all students who are entering Duke Summer School for the first time to work for the Master of Education degree must conform to the new requirements, except that on recommendation of the Department of Education the Dean of the Graduate School may permit a student to submit a thesis carrying six hours of credit for six hours of the generalized readings prescribed and for the comprehensive examinations otherwise laid down. Those students who have already begun their course of study leading to the Master of Education degree will be permitted to transfer to the new plan if their credits indicate such transfer to be feasible and if the transfer has the approval of the Chairman or of the Director of Graduate Study of the Department of Education. In general, students who have completed more than twelve semester hours of work are strongly advised not to attempt the transfer, because of the serious loss of credit that they would usually suffer. Furthermore, all students contemplating the change should realize that they would be required to spend at least three additional weeks in residence and probably more by reason of the more specific requirements of the new plan. If, after reading the statement below of the new requirements for the Master of Education degree, the student still desires to adapt his program to the new regulations, he should address an inquiry for further information to the Director of the Summer School or the Chairman of the Department of Education. Students under the old plan in all other cases will be required to complete their work for the degree under the regulations in the *Summer School Bulletin of 1937*.

Candidates for the Master of Education degree must take a minimum of thirty-three semester hours of graduate work in residence at Duke University, classified as follows:

(1) Twelve semester hours of generalized work in education, as explained below.

(2) Six to twelve hours of minor work.

(3) Nine to fifteen hours of an intradepartmental or "professional" major.

The twelve semester hours of generalized work, analogous to Honors reading, will be followed by a comprehensive written examination at the close of the thirty-three weeks. This work will be based upon four courses of three semester hours each, consisting of Education S300, S304, S305, and S317, of which the student must take one and will be permitted to take as many as two in class, although the readings and examination will go beyond class work. For the two or three courses the student does not take in class, he will be allowed free time in his third and subsequent terms of summer school.

For the six to twelve semester hours of minor work, the following suggestions are offered:

(a) For those candidates, whose intradepartmental, or "professional" major is public school administration, six hours in political science, economics, sociology, or other work especially listed as "related courses in other departments for majors in public school administration."

(b) For those whose professional major is public school supervision, six to nine semester hours in psychology, educational psychology, or a combination of the two, or sociology, or in specifically designated "related courses" for supervisors.

(c) For those whose professional major is secondary education, six to twelve hours in their teaching field(s), with twelve hours strongly recommended.

(d) For those whose professional major is elementary education, six semester hours in psychology, educational psychology, or an approved combination of the two, or in child welfare and development (wholly in sociology, or partly sociology and psychology or educational psychology, if a satisfactory combination can be worked out).

The nine to fifteen semester hours of the professional major may be in the field of public school administration, public school supervision, secondary education, or elementary education.

At any time after the completion of his minor and his professional major, the student can take the general examinations on these two phases of his program on the days designated for them. Upon the fulfillment of all residence requirements, he will be given a comprehensive written examination upon the twelve hours of generalized readings. Any of these examinations may be rejected upon the grounds of poor usage of English.

As in the case of the requirements for the Master of Arts degree, all work presented for the degree must be completed by the candidate within a period of six years from the date of beginning. Graduate credits from other approved institutions may be accepted up to a maximum of six semester hours, but such acceptance of credits will not lessen the requirements of study in residence at Duke University.

DEGREE OF DOCTOR OF PHILOSOPHY

A student who plans to enter upon a program of work leading to the degree of Doctor of Philosophy should consult, or enter into correspondence with, the Dean of the Graduate School and the head of the department concerned. He will then be advised as to the possibility of securing the necessary instruction and supervision of research in the desired field. Credit for as much as one year of graduate work done in summer school sessions may be given with the approval of the Graduate School and the department in which the student takes his major work. The student should consult the bulletin of the Graduate School for a full statement of requirements for the degree of Doctor of Philosophy.

THESIS WRITING IN SUMMER SCHOOL

Since Duke University grants no Master of Arts degree except upon completion of a satisfactory thesis, every candidate for that degree who expects to complete his work in Summer School should as soon as possible after completing his first term of residence choose a field in which he desires to write a thesis and confer with some instructor offering graduate courses in that field. The following points should be kept clearly in mind when arrangements are made for thesis supervision:

1. The subject of the thesis must be approved by the instructor who undertakes the supervision. The instructor's decision as to whether the topic is suitable, or the student is prepared to develop it, or the instructor prepared to supervise it, is final.

2. A student may enroll for six semester hours of residence credit towards a thesis or for less, in one term of six weeks. If he enrolls for only three semester hours he may enroll also for a course of three semester hours, but he cannot enroll for a total of more than six semester hours of credit, including residence toward his thesis. Completion of six semester hours of residence toward his thesis does not guarantee the satisfactory completion of the thesis, which must be acceptable to the instructor supervising it and to a committee representing the Council on Graduate Instruction. Students who do not complete their theses the first term they register for supervision have the privilege of registering a second term upon payment of regular dues, but are not required to do so. Since the numbers permitted to enroll in thesis seminars are strictly limited, such students are not permitted to register for a third term of supervision.

3. A student may either enroll in a specifically designated "thesis" course or, if his preparation meets the approval of the instructor in charge, attach himself to some regularly offered course in his field of study and report periodically to the instructor offering the course.

A student enrolling for thesis residence credit in regular course pays the same fees as other students during the summer of residence. At the time of graduation he pays the same diploma and commencement fees as other students and a thesis supervision fee of \$25.00.*

5. Students enrolling for thesis supervision during the Summer School are expected to complete their theses largely during the summer of enrollment or some subsequent summer term. The instructor with whom they enroll is not under obligation to give active supervision during the academic year, although instructors are willing to give a reasonable amount of attention to theses practically completed. Similarly, instructors in Duke University who are not teaching in the Summer School are not expected to undertake the supervision of theses written by summer school students.

6. Students of the academic year who do not complete theses begun prior to Summer School are not accepted for summer school enrollment unless their subjects are in the field of some thesis seminar or other course offered by an instructor who recommends that such students be assigned to his supervision during the summer. Instructors who are employed for full time by the Summer School are specifically requested not to carry over into the summer thesis students whose subjects are not properly a part of work such instructors are offering in the Summer School.

ROOM AND BOARD

Board and room for a term of six weeks may be secured in the men's dormitories at the rate of \$51.50 for a single room, \$46.50 for each occupant, with two in a room, or \$59.00 if double room, alone, is engaged. On account of extra service the rate in the women's dormitories is one dollar a term higher; that is, \$52.50 for a single room, \$47.50 for each occupant, with two in a room, and \$60.00 for a double room, alone. These rates both for men and women are in each case one dollar lower than the total for board and room counted separately. Many of the rooms on the East Campus are single rooms; on the other hand, on the West Campus there are very few single rooms, most of these on the third floor. All corner rooms on the East Campus are \$1.50 per term higher rent per occupant than other rooms. During the first term, graduate students will live on the West Campus, and undergraduates on the East. During the term when all students will live on the West Campus, separate dormitories

* Students completing the M.Ed. degree by examination pay examination fee of \$25.00, in lieu of the thesis supervision fee.

will be reserved for graduate students and for undergraduates. Occupants of University rooms furnish their own bed linen, blankets, pillows, and towels. All other essentials are supplied by the University.

A section of the new graduate dormitory will be available for Faculty members and married students whose wives accompany them. There are, however, no dormitory accommodations for children. Students or Faculty members who desire to bring children should write the Director for a list of private rooming places where suitable accommodations may be obtained. Occupants of the graduate dormitory furnish their own bed linen and other essentials on the same basis as other students.

The rules and regulations in all dormitories are substantially the same as those for the regular academic year; but *in the graduate dormitories all radios, phonographs, and other noisemaking appliances are strictly forbidden.*

All occupants of University dormitories are advised to board in the regular dining room of the Union, where at meal time there is the opportunity to meet with fellow students, and where, because board is furnished at cost, the greater number of students guarantees better board for all. The service is cafeteria plate-service. Men who live in the dormitories but desire to board elsewhere than in the regular dining room will pay room-rent at the rate of \$17.50 for a single room, \$12.50 for each occupant, with two in a room, or \$25.00 for a double room, alone; and women, at the respective rates of \$18.50, \$13.50, and \$26.00; and married students and their wives at the rate of \$30.00 per room. Students who room off the campus but desire board in the Union may obtain it for thirty-five cents a meal, or \$35.00 for the six weeks. Students who present their receipted room reservations at the time of purchasing meal-tickets for the term are allowed a discount of one dollar from the \$35.00 rate for their meal-tickets, as stated above, this accounting for the combination room-and-board-rate quoted above. Since the sole purpose of this discount is to encourage a larger volume of business in the regular dining room and thereby to obtain the best possible board for the large majority of students who take their meals there, it is not effective in the Union Coffee Shop, where the more expensive *a la carte* service may be obtained by those who prefer it.

FEES

Teachers in active full-time service in schools and colleges are exempt from tuition fees for as many as four terms of six weeks in a period of six years. After their fourth term they pay regular tuition charges. All other students are charged a tuition fee of \$8.00 for each college-credit hour, or \$4.00 for each semester hour, maximum tuition being \$24.00 for six weeks, or \$30.00 for courses running seven weeks. All students, teachers included, pay a registration fee of \$18.00 per term. Students in the sciences pay the laboratory fees required in regular term, and students completing degrees pay the regular commencement charges at the time of receiving their degrees, besides the thesis supervision or M.Ed. examination fee of \$25.00 required of persons completing Master's degrees.

Major expenses will be estimated as follows for each term:

Registration	\$18.00
Room-rent and board	47.50
Recreation ticket	1.50
Total major expenses to teachers	<u>\$67.00</u>

In the men's dormitories, as has been stated, the charge for rooms is one dollar less, making the total major expenses for occupants \$66.00. To these totals should be added the tuition fee of \$24.00 charged students other than teachers in the public schools and also charged teachers who have already received four terms exemption, about \$7.00 for books, and probably \$3.00 for miscellaneous expenditures. All claims for exemption from tuition should be filed at the time of registration.

RESERVATION IN ADVANCE

Classes are of limited enrollment. All applications for registration in classes, as well as applications for rooms, are filed in the order in which they are received. Each application for a reservation of courses should be accompanied by a check for \$5.00 in part payment of the registration fee unless room-rent is enclosed. *No specific rooms are assigned except upon receipt of full room-rent.* Because the rapid growth of the Summer School makes it uncertain that late applicants will find room on the campus, *students are urged to reserve specific rooms in advance.* They may reserve specific rooms by paying, at the time the reservation is made, the regular charge for the room reserved, usually \$17.50 (or \$18.50) for a single room, \$12.50 (or \$13.50) for a room with a roommate, \$25.00 (or \$26.00) for a double room alone, or \$30.00 for room in the section reserved for married students. Specific room reservation for the first term may be made at any time. Since the total registration for the first term affects the decision as to which buildings are to be used for the second term, specific reservations for second term should not be requested before July 10. Students who pay their room-rent in advance are allowed until May 25 to select a roommate. Adjustments may be made as to roommates within the first three days of the term. No room may be reserved by more than two students, but adjoining rooms may be reserved by groups who desire to be together. Students who enroll for the first term have priority in reserving their first-term rooms for the last term. The University reserves the right in the interest of the Summer School and the other students to cancel any reservation of courses or room without assignment of reason. Any student making deposit for reservation or room-rent is entitled to withdraw with full refund at any time within five days prior to registration without assignment of reason.

During the first term all undergraduate classes, except those in accounting, chemistry, forestry, and physics will meet on the East Campus; all other work will be offered on the West Campus. During the second term, all classes will meet on the West Campus. Each campus has its

complete equipment immediately available—classrooms, library, dining rooms, health department and recreational facilities, bus service to the other campus and to town, etc. Since the two campuses are about a mile apart, students are advised to live on the campus where their classes will be held. Exception is made in the case of students of undergraduate-college age, for whom rooms will be reserved only on the East Campus during the first term.

APPOINTMENTS BUREAU

A Teachers' Appointments Bureau is maintained for the benefit of teachers desiring a change of position. There is no charge for this service.

RELIGIOUS SERVICES

University religious services are held each Sunday morning at 11:00 o'clock, to which all students are invited. In the summer of 1939 the student choir, a voluntary organization, enrolled over two hundred students. A series of organ recitals are also given Sunday afternoon and at other times each week in the University Chapel.

RECREATION AND ENTERTAINMENT

At the time of registration every student receives a season ticket to all recreation and lecture programs. In addition to admission to special lectures, and other features of entertainment provided, this ticket entitles the student to use of the tennis courts and of the swimming pools, which are open an hour and a half daily for various groups of students; also to social events limited to students. There are also an evening play-hour sponsored by the Department of Physical Education and a Sunday evening "sing" that has grown to be a tradition among the quadrangle students.

Mr. Anton Brees, Carillonneur of the Mountain Lake Singing Tower, Lake Wales, Florida, will give recitals on the fifty-bell carillon of the University at stated times twice a week during the Summer School.

The national honor society in education, Kappa Delta Pi, maintains a weekly forum to which all students are invited.

State clubs, organized by students from the states best represented in the student body, chiefly the students from West Virginia, Pennsylvania, and Ohio southward to Florida and Mississippi, co-operate with the Social Director to provide wholesome recreational life for the students. At the beginning of each term the management of the University Union co-operates with the state clubs to provide an all-state dinner. The first Thursday evening of each term is set aside for the opening general assemblies of students and Faculty.

CONFERENCE ON THE STATUS OF TEACHING AS A PROFESSION

In co-operation with the National Education Association and the North Carolina Education Association a conference on the status of

education as a profession is planned for Tuesday evening, June 25, and the day following.

COACHING SCHOOL

The Athletic Department of the University conducts a one-week coaching school for high-school coaches, July 29 to August 3. Registration for the school is \$10.00. The courses will be offered by Coach Wallace Wade and his staff and will include football, basketball, and track.

AFFILIATED SUMMER SCHOOL

The Junaluska School of Religion, Lake Junaluska, North Carolina, is an independent school affiliated with Duke University. It will offer courses in religion toward the A.B. and B.D. degrees. Its single term will begin July 15 and close August 24. (For further information address Dr. Paul N. Garber, Director, Duke University, Durham, N. C., and see page 57, this bulletin.)

SCHOOL FOR WORKERS IN CHILDREN'S HOMES AND ORPHANAGES, JULY 29 TO AUGUST 17

In co-operation with the Tri-State Conference of Orphanage Workers the Summer School will operate a three-weeks school for the in-service training of teachers and personnel employees in the children's homes and orphanages of Georgia and the Carolinas. The program will consist of a regular ninety-minute period daily in the mental hygiene of the school child, a sixty-minute lecture daily followed by open forum discussions on problems connected with child development, social service, and institutional administration, and evening lectures of broad cultural interest. Monday, July 29, will be registration day, and lectures will begin that evening. Monday, August 5, will be a holiday in order to give the students attending opportunity to visit near-by points of interest in their work. These students will receive the same consideration as teachers in the public schools and will be exempt from tuition charges. Their total expense for board, room, and fees, with two persons to a room, will be \$32.00 for the three weeks, or \$38.00 if room alone is engaged. A certificate of attendance and of work completed will be given at the close of the school, but it has not been arranged to offer credit toward college degrees for the work. For further information, address the Director of the Summer School, Duke University, or the Reverend E. F. Gettys, President, Tri-State Conference of Orphanage Workers, John De la Howe School, McCormick, South Carolina.

CONFERENCES FOR WORKERS IN GUIDANCE, JUNE 13 TO JULY 20

In connection with the courses on Guidance offered in the graduate department of education, it is planned to have all-day programs of lectures, forums, and conferences, for social workers, teachers, and school officials interested in the programs of educational and vocational guidance. Students in the Summer School and others are invited to attend these sessions. For complete program, write the Director of the Summer

School after May 1. The conferences will be scheduled for one or two days weekly.

SUMMER SCHOOL OPPORTUNITIES FOR GRADUATE STUDENTS

A majority of the students in the Summer School are graduates of standard colleges, most of them supervisory officials and teachers in the public schools. Departments of instruction, therefore, offering courses related to the common secondary-school curriculum have built up regular sequences of graduate work continuing through a series of summer schools in which graduate students may enroll with reasonable assurance that sufficient work will be offered to enable a properly qualified student to complete Master's requirements easily within the period permitted by the University. Departments in which sufficient demand for graduate courses has developed to enable students to complete Master's degrees are Botany, Economics, Education, English, French, History, Mathematics, Physics, Political Science, Psychology, Religion, Sociology, Spanish, and Zoology. It is intended to add complete sequences in other departments as rapidly as demand justifies. The Department of Religion offers work toward the B.D. degree, and students in that department can also obtain B.D. work in the affiliated summer school at Lake Junaluska. In the Department of Education complete sequences of work for the Master's degree are offered in the divisions of public school administration, public school supervision, secondary education, educational psychology, and elementary school education. This variety of offerings should cause students in this department to be especially careful to select a unified course.

In all departments a graduate student must select his minor with the approval of his major department. Under "Courses of Instruction," pages 31-60, this bulletin, specific regulations and suggestions of departments are given. It is important for all degree candidates to choose their courses according to some unified plan. Mere accumulation of more or less unrelated credits in various divisions of a department with a minor in some department only remotely related to the student's major work will not be accepted as meeting requirements for a graduate degree. Students are advised to choose their first term's work along the line of their major interest and then each succeeding term exercise increasing care in advising with their major professor and the Dean of the Graduate School as to properly related work.

UNDERGRADUATE TEACHERS WORKING TOWARD DEGREES

Undergraduate teachers planning to register for Bachelor's degrees from Duke University should correspond with Dr. Walter K. Greene, Dean of Undergraduate Instruction, and bear in mind the following elementary minimum requirements for all groups of studies leading to the A.B. degree: English, six semester hours; natural science, eight; economics, history, or political science, six; one foreign language completed through the third college year, twelve or eighteen semester hours; and religion, six.

**COURSES EMPHASIZING PUBLIC SCHOOL CURRICULUM
RECONSTRUCTION OFFERED IN THE SUMMER OF 1940**

Courses in public school curriculum reconstruction will be emphasized in the summer of 1940 as in the five preceding summers. Interested persons are referred to the courses listed under Secondary and Elementary Education, on both graduate and undergraduate levels. More than three hundred teachers in the public schools were enrolled in these courses in the summer of 1939.

COURSES OF INSTRUCTION

EXPLANATIONS AND ABBREVIATIONS

Classes meet daily five times per week for six weeks unless otherwise indicated. Classes that meet for sixty-minute periods are indicated as carrying two semester hours of credit. Classes meeting eighty-five minute periods daily count for three semester hours except where credits are stated otherwise. Courses are arranged alphabetically by departments. The course numbers are the same numbers used in describing courses in the regular term, with the letter "S" preceding; for example, Chemistry S1 would correspond to Chemistry 1 of the regular term.

The following abbreviations occur: the numeral *1* means that the course comes the first sixty-minute period daily, beginning at 8:25; *2*, the second sixty-minute period, beginning at 9:40; *3*, the third sixty-minute period, beginning at 11:20. *A* means that the course comes the first eighty-five minutes daily, beginning at 8:00; *B* means that the course comes at the eighty-five-minute period, beginning at 9:40; *C* means that the course comes at the eighty-five-minute period beginning at 11:20; *D* means that the course comes at the eighty-five-minute period beginning at 2:15; *I* means that the course is offered the first term; *II*, that it is offered the second term, beginning July 25; *I, II*, that the course is offered either term. *E* means that the course is offered on East Campus; *W* on West Campus. Unless stated to the contrary all classes are scheduled for the West Campus; except that for the first six weeks undergraduate classes, those numbered below 200, will be scheduled for the East Campus unless statement is made to the contrary. For complete schedule of rooms and courses, students should consult official bulletin boards at time of registration.

Periods 1, 2, and 3 do not conflict; and periods A, B, C, and D do not conflict; but period A conflicts with 1, B with 2, and C with 3. Terms I and II do not conflict.

N.B.—Different State Departments of Education grant professional credit for various courses in accordance with their own carefully defined rules. Every student should inquire carefully at or before registration as to what professional credit is allowed for each course in his state.

THESIS COURSES FOR MASTER'S DEGREE CANDIDATES

It is important for every candidate for a Master of Arts degree to plan for his thesis as soon as possible after he completes his first summer school. (See suggestions for planning theses, pages 23-24, this bulletin.) Special attention is called to Education S234X, S300, S300X, S309, S322, S333X, Chemistry S275X, English S301, S307, S308, S329, S332, French S315, S350, History S306X, S315, S317, S330, S333, S343, Mathematics S389X, S390X, Physics S353X, Religion S368, Sociology S340, Spanish S373, and Zoology S353. A properly qualified student, however, may with the approval of the instructor and the head of his department attach himself to any graduate course for thesis supervision.

BIOLOGY

See courses listed under Botany and Zoology.

BOTANY

For admission to candidacy for the Master's degree in Botany, students must have completed a minimum of eighteen semester hours of biological science, including six semester hours of botany in courses numbered above

one hundred. Students, who have not yet had the minimum eighteen hours, however, may enter higher courses by permission of the instructor, if he is convinced that they can carry the work, for undergraduate credit, and may count such work toward the eighteen hours necessary for candidacy.

S201. Structure of Seed Plants.—The development and structure of vegetative and reproductive organs of seed plants, with special emphasis on Angiosperms. Prerequisite: two years of botany or equivalent. *A and B, I, 3 s.h.* (*Laboratory fee, \$2.50.*) MISS ADDOMS

S216. Preparation of Botanical Materials.—A study of materials and equipment used in botanical teaching, including the selection, collection and preservation of materials and the preparation of microscopic slides. Prerequisite: two years of botany or equivalent. *2:00-5:00 P.M., I, 3 s.h.* (*Laboratory fee, \$5.00.*) MISS ADDOMS

S225. Special Problems.—*Lecture 2:00-2:40, laboratory 3:00-5:00 daily, I, II. Credit to be arranged.* STAFF

S235. Introduction to Field Botany.—A survey of the ferns and seed plants of the Piedmont; practice in identification; regular field trips to learn the common as well as rarer species in their native habitats. Prerequisite: one year of botany or equivalent. *Lectures and field trip or laboratory daily, morning and afternoon, I (first three weeks). 3 s.h.* MR. OOSTING

Note.—This class consumes the entire day for the first three weeks and therefore conflicts with all other courses offered. It carries graduate credit provided S236 is also completed for graduate credit; otherwise undergraduate credit only.

S236. Field Botany.—A continuation of Botany S235, with field work extended to include montane and coastal plain vegetation. Experience in the identification of the more difficult families, collecting and preserving specimens, the keeping of records and use of the herbarium. Prerequisite: S235 or equivalent. *Closes daily, morning and afternoon, I (second three weeks). 3 s.h.* MR. OOSTING

S359. Research in Botany.—Individual investigation in the various fields of botany. *Credit to be arranged, I, II.* STAFF

The following courses are planned at the Marine Laboratory in Beaufort, North Carolina:

S211. Structure and Classification of Algae.—*II.* 6 s.h.*

MR. BLOMQUIST AND ASSISTANTS

S225. Special Problems.—*II.*

MR. BLOMQUIST

S359. Research: Taxonomy, Morphology.—*II.*

MR. BLOMQUIST

For particulars as to expense, etc., write the Director of the Summer School or Dr. H. L. Blomquist, Chairman of the Botany Department, Duke University.

NOTE 1. Unless stated to the contrary, all classes are scheduled for the West Campus; except that for the first six weeks undergraduate classes, those numbered below 200, unless specifically indicated otherwise, will be scheduled on the East Campus. For complete schedule of rooms and classes students should consult official bulletin boards at time of registration.

NOTE 2. Unless a different limitation is stated, all courses numbered 200 or above are limited in enrollment to twenty-five students, those numbered 300 or above are limited to fifteen, and thesis seminars to ten. In exceptional cases by the consent of the instructor, the Graduate School may extend those limitations.

* July 22 to August 31.

CHEMISTRY

S1. General Inorganic Chemistry.—Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. It is desirable, though not required, that students taking this course shall have taken elementary physics either in high school or in college. *Recitation daily, 1; lecture daily, 11:30; laboratory hours to be arranged, II (July 17 to August 10) 4 s.h. (w) (Laboratory fee, \$7.00.)*

MR. R. N. WILSON AND MR. BRADSHER

S2. General Inorganic Chemistry.—Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. Prerequisite: Chemistry S1. *Recitation daily, 1; lecture daily, 11:30; laboratory hours to be arranged, II (August 12 to September 2). 4 s.h. (w) (Laboratory fee, \$7.00.)*

MR. R. N. WILSON AND MR. BRADSHER

S61. Qualitative Analysis.—A study of the reactions of acids, bases, and salts in solution as applied to the qualitative analysis of mixtures of inorganic compounds of the more familiar elements. *Lecture or recitation daily, 9:00-10:30; laboratory daily, 11:00-12:30 and 2:00-5:00, I (June 12 to July 9). 4 s.h. (w) (Laboratory fee, \$7.00.)*

MR. HOBBS AND MR. RUSSELL

S70. Quantitative Analysis.—A number of representative quantitative analyses are carried out in the laboratory, and the underlying theory is taken up in the lectures. *Lecture or recitation daily, B; laboratory daily, C and 2:00-5:00, I, II (July 10 to August 7). 4 s.h. (w) (Laboratory fee, \$7.00.)*

MR. HILL AND MR. AYRES

S151. Organic Chemistry.—An introduction to the study of carbon compounds. Compounds of aliphatic series form the basis of lectures, discussions, and laboratory experiments. Prerequisites: courses S61 and S70, except by permission of the instructor. *Recitation, 8:00; lecture, 2:00 daily; laboratory, 9:00-12:00 daily except Saturday, I (June 12 to July 9). 4 s.h. (w) (Laboratory fee, \$8.50.)*

MISS BROWN AND MR. ABRAMOVITCH

S152. Organic Chemistry.—A study is made of compounds of the aromatic series, and of carbohydrates and proteins. Prerequisite: course S151. *Lectures, 8:30; recitation, 11:00 daily; laboratory, 2:00-5:00 daily except Saturday, I, II (July 10 to August 7). 4 s.h. (w) (Laboratory fee, \$8.50.)*

MR. HAUSER AND MR. HUDSON

S261. Physical Chemistry.—Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Prerequisites: Chemistry S70, S151-S152, Physics S1-S2 or equivalent and Mathematics 7-8 or equivalent. Calculus is desirable but is not required. *Recitations daily, 1, 2; laboratory daily, 2:00-5:00, I (first three weeks). 3 s.h. (Laboratory fee, \$7.00.)*

MR. SAYLOR AND MR. GOULD

S262. Physical Chemistry.—Continuation of S261. *Recitations daily, 1, 2; laboratory daily, 2:00-5:00, I (second three weeks). 3 s.h. (Laboratory fee, \$7.00.)*

MR. SAYLOR AND MR. GOULD

S275X. Thesis Research.—Research in the fields of physical or organic chemistry. Open only to those students whose research programs for the A.M. or Ph.D. degrees have been approved by the department and by one of the instructors in charge of the course. *Schedule to be arranged (first eight weeks), I, II. 2 to 8 s.h. (Not more than one semester hour of credit per week full-time schedule, or one semester hour each two weeks for half-time schedule.)*

MR. BIGELOW, MR. HILL, AND MR. HOBBS

(In lieu of regular fees in this course, students enrolling for four semester hours or less pay simple registration of \$18.00; all others pay special registration fee of \$25.00. Laboratory fees are arranged with the instructor according to materials used or destroyed.)

Note.—S275X, as a course to give instruction in methods used in the investigation of original problems, is open to graduate students and even to undergraduate Seniors who have had courses 70 and 151-152. Students other than thesis students, however, must not only have the approval of the instructor but also pay regular registration, tuition, and laboratory fees.

ECONOMICS

For admission to candidacy for the Master of Arts degree in Economics, the student must meet the general requirements for admission to the Graduate School and must have had twelve semester hours in economics, including Principles of Economics. Twelve additional semester hours must be offered in political science, sociology, or history.

Every candidate for a Master's degree must elect six semester hours of graduate work in Economic Theory. The other twelve hours in economics should be elected as follows: six hours in the field in which he writes his Master's thesis and three hours in each of the two other fields. For purposes of concentration, the fields in addition to Economic Theory shall be Finance, Economic History, History of Economic Thought, and Social Economics. The minor of six semester hours must be taken in political science, sociology, or history, or in some other department approved by the major department.

S51. Principles of Economics.—A short course in the essential principles of economic science. (This course will not count as part of the minimum economics requirements for graduation until the equivalent of S52 has been completed. It will, however, count as elective credit.) *B, I. 3 s.h.*

MR. EITEMAN

S57-S58. Principles of Accounting.—Elementary principles of single proprietorship, partnership, and corporation accounting. *Period C will be used as a laboratory period. A, B, C, I. 6 s.h. (w)*

MR. BLACK

S115. Economic Geography: Teachers' Course.—A study of the interrelation of human activities and environmental elements. The discussion embraces location, maps and their interpretation, the major climatic regions, seasonal influences, weather, lands and their uses, soils, and minerals, bodies of water, plants, animals, and the works of man, as environmental factors. *A, I. II. 3 s.h.*

MR. LEMERT (*first term*)

MR. KEECH (*second term*)

Note: Conservation of Natural Resources.—Teachers especially desiring to take courses dealing with the conservation of natural resources are advised to elect S115, or S116 below. Teachers with book background in geography should elect S116 if they can take only one of the two.

S116. Economic Geography and Industrial Organization.—A study of the economic resources and industries of the world: a general appraisal of the natural and the cultural environment; agricultural and manufacturing industries and their location; the conservation of natural resources; world aspects of resource ownership and utilization. *C, I. 3 s.h.*

MR. LEMERT

S171-S172. Advanced Accounting.—Advanced accounting theory and practice applied to the managerial problems of valuation and operation in corporations, consolidations, mergers, and liquidations. Open to students who have completed Accounting S57-S58. *Period C will be a laboratory period. A, B, C, I. 6 s.h. (w)*

MR. SHIELDS

S203. Money, Banking, and Credit.—A consideration of the basic principles of monetary and banking theory and practice. Particular attention is given to the American money and banking systems and their evolution. *B, II. 3 s.h.* MR. WELFLING

S204. Money, Banking, and Credit.—An examination of monetary and banking problems—the gold standard, central bank policy, inflation and deflation, attempts to control prices and the business cycle, and international exchange. Developments since 1914 are studied particularly. *D, II. 3 s.h.* MR. WELFLING

S218. Population Problems and the Standard of Living.—A critical survey of the economic laws of returns and of pre- and post-Malthusian population theory; consideration of the relation between natural increase and the laws of economic distribution and of the effects of changes in the rate of natural increase upon various classes of industry and upon unemployment; examination of the factors which govern population growth and of current population trends; analysis of international economic and political problems which are founded upon population pressure; consideration of the economic and the biological aspects of differential birth-rates. *A, I. 3 s.h.* MR. SPENGLER

S230. Public Debts in the United States.—A study of the characteristics of public credit as shown by the experience of national, state, and local governments in the United States. Topics considered include: forms, methods, and purposes of borrowing; effects of the contraction and repayments of debts on governmental fiscal policies, the banking and credit system, and business activity; methods of controlling or limiting debts; refunding and adjustment procedures; defaults and repudiations. *A, I. 3 s.h.* MR. RATCHFORD

S231. The Economic History of Modern Europe.—A study of the economic development of Europe since the sixteenth century, treating such topics as the guilds, mercantilism, money, banking, crises, the commercial revolution, and the Industrial Revolution. The rise of modern capitalism and the historical backgrounds of present economic problems will be emphasized. *C, I. 3 s.h.* MR. T. S. BERRY

S232. The Economic History of the United States.—A study of the agricultural, industrial, commercial, and financial progress of the United States from colonial times to the present day. Special attention will be devoted to mass production, business cycles, great fortunes, and the relationships between government and business. *D, I. 3 s.h.* MR. T. S. BERRY

S236. Public Finance.—This course deals with public expenditures, public revenues, public debts, and financial administration. *C, I. 3 s.h.* MR. RATCHFORD

S240. Economic Theory.—A survey of present-day economic doctrines intended primarily for secondary teachers, and for graduate students not specializing in economic theory. *B, I. 3 s.h.* MR. SPENGLER

EDUCATION

For admission to candidacy for the Master of Arts (A.M.) degree with major in Education, or for the Master of Education (M.Ed.) degree, students must, in addition to meeting the general requirements for admission to the Graduate School, meet the following specific requirements: 1. Eighteen semester hours of acceptable prior work in Education; 2. Twelve semester hours acceptable prior work in a minor field (Exception: if Psychology or Sociology is offered for the minor, six semester hours of work completed after entering the junior year in college will be accepted).

Graduate courses in the Department are grouped under the following subdivisions: Public School Administration, Public School Supervision, Secondary Education, Elementary School Education, and Educational Psychology. Every candidate for the Master of Arts degree in the Department should elect at least twelve semester hours in the one of these fields in which he intends to write his thesis and the remainder of his work, including the six semester hours in his minor, with the approval of the proper division adviser. Dr. Proctor is adviser to students in School Administration; Dr. Proctor, Dr. Carr, and Dr. Scates advise majors in Supervision; Dr. Carr is adviser in Elementary Education; Professor Childs advises in Secondary Education; and Dr. Brownell, Dr. Scates, and Dr. Easley advise in Educational Psychology. Candidates for the M.Ed. degree under the new requirements should read with special care the regulations of the Graduate School as set forth on pages 22-23, this bulletin.

PUBLIC SCHOOL ADMINISTRATION (GRADUATE COURSES)

(Master's candidates in this division elect their minor work in Political Science, Economics, or Sociology. Candidates for the Master of Education under the new plan must take fifteen semester hours of work from the courses specifically listed under this division.)

S203. Principles of School Administration.—Prerequisite: six semester hours of courses in classroom management and educational psychology. This course is recommended for all students beginning a major in school administration. *B, I. 3 s.h.*
MR. PROCTOR

S224. Current Problems in Public Education as Revealed through School Surveys.—A study of recent developments in public education as revealed through school surveys and resulting from the survey movement. Section 1 recommended for high-school teachers, principals, and school administrators; Section 2 recommended for elementary school teachers, principals, and supervisors. *Section 1, D; Section 2, C, I. 3 s.h.*
MR. GAMBLE

S234. Secondary School Organization and Administration.—A study of the outstanding problems of secondary school organization and administration other than the problems of gradation and classification of pupils. (For these two problems, see course S233 listed under Supervision.) For first-term students, Section 1 recommended for principals of high schools, and teachers of five or more years' experience; Section 2 recommended for teachers of less than five years' experience. *Section 1, A, I; Section 2, C, I, II. 3 s.h.*

MR. HOWARD (*first term*)

MR. GOLDTHORPE (*second term*)

S253. Legal Phases of School Administration.—A study of judicial decisions and the development of outstanding features of statute law controlling school administration. *A, C, II (first three weeks). 3 s.h.*
MR. LOWERY

S323. Public School Finance.—A study of educational costs, sources of revenue for the support of public education, collection of revenue, basis of distribution, and accounting for funds spent. *C, II. 3 s.h.*

MR. PROCTOR AND MR. FOWLKES

S333X. Thesis Seminar: Research in School Administration.—For thesis students and others by permission. *Credit to be arranged. D, I, II.*

MR. PROCTOR (*either term*)

MR. OVERN (*either term*)

S343. State and County School Administration.—A study of the state and county organization of public schools, emphasizing underlying principles. (Enrollment in this course is limited to students who have already had at least

six semester hours in public school administration. Students who are expecting to write theses the summer of 1940 in the field of public school administration will be given preference in enrollment.) *B, I. 3 s.h.* MR. GOLDTHORPE

S353. Economic and Social Aspects of School Administration.—A consideration of the aspects, problems, and trends of economic life, social organization, and governmental agencies in their relationships to educational administration policy; the responsibilities and opportunities of education in present-day economic and social conditions. Prerequisite: six semester hours in school administration. *A, I, II. 3 s.h.* MR. GOLDTHORPE

S363. City School Organization and Administration.—Problems confronting the administrative officer in local schools, such as relations of superintendent with board and public, organization of schools, development of curricula, selection and promotion of teachers, etc. *B, II. 3 s.h.* MR. PROCTOR AND MR. FOWLKES

Other courses accepted, not to exceed a total of nine semester hours, as work in School Administration are the following, when the student has the approval of his major professor: S209, S232, S233 or S233A, S273, S287, S288, S293, S304, S305, listed under the division of Supervision; S208, S258, listed under Educational Psychology; S205, S206, S216, listed under Secondary Education; and S207, S212, S222, listed under Elementary Education. It will be noticed that not all of these courses are offered this summer, but the complete list is published for the benefit of students who have already completed those not offered in 1940.

PUBLIC SCHOOL SUPERVISION (GRADUATE COURSES)

(Master's candidates in this division elect their minor work in Psychology or an approved combination with Educational Psychology, or in Sociology. Master of Education candidates are permitted as many as nine semester hours of work in their minor, but take the remaining twelve or fifteen, if minor is only six hours, from courses specifically described or listed under Supervision.)

S209. Statistical Methods in Education.—A course intended to familiarize teacher, supervisor, and administrator with the statistical method of treating educational and social data, so as to enable them to interpret and use the results of recent investigation in the science of education. Presented primarily from the point of view of the classroom teacher. *A, I. 3 s.h.* MR. ODELL

S222. The Curriculum and Materials of the Elementary Grades.—A study of curriculum problems in the elementary schools. (Not open to students who had S242 in the summer of 1935 or 1936.) *Section 1, A; Section 2, B, I; Section 3, A, C, II (first three weeks). 3 s.h.*

MR. HILLMAN (*first term*)

MR. P. R. SPENCER (*second term*)

S224. Current Problems in Public Education as Revealed through School Surveys.—*Section 1, D; Section 2, C, I. 3 s.h.* MR. GAMBLE

S232. Elementary School Supervision.—A survey of supervision as a means of improving instruction and adapting the curriculum to child and community needs. *B, II. 3 s.h.* MR. OVERN

S233A. Pupil Personnel Problems in the Elementary School: Guidance.—The purpose of this course is to aid principals, supervisors, and teachers of elementary school children to gain an appreciation of the role of guidance and personnel work in a modern educational program as well as a knowledge of procedure and techniques. Emphasis is placed upon the educational signif-

See footnote, p. 32, as to limitation of the class enrollment in graduate courses.

icance of the child's development, why children behave as they do, ways of meeting children's needs through school experiences, the function of the teacher in guidance, and the problem of supervisory officials in training teachers to do this work in the elementary schools. *Section 1, B, D, I (first three weeks); Section 2, C, I. 3 s.h.*

MISS STRANG (*section one*)

MR. OVERN (*section two*)

S273. Problems of High-School Supervision.—A consideration of such problems as aims and purposes of high-school supervision, elements of an effective supervisory program of supervision for city and rural schools, the administration of supervision. *Section 1, A, I; Section 2, B, I; A, C, II (first three weeks). 3 s.h.*

MR. HIGHSMITH (*first term*)

MR. J. M. GWYNN (*second term*)

S287. Problems of Mentally and Educationally Retarded Children.—The causes, types, and degrees of mental retardation; psychological theories of mental deficiency; the education of slow learners in regular and special classes; the organization, objectives, curriculum, and teacher of the special class; the social and eugenical bearings of mental deficiency. The educational problems receive major consideration. *Section 1, A, I; Section 2, B, I. 3 s.h.*

MR. WALLIN

S288. Problems of Mental Hygiene and Education.—The problems, objectives, scope, factors, and techniques of mental hygiene, particularly with reference to its educational and social implications; the prevention of hampering personality difficulties and wholesome personality development; types of adjustment difficulties in different types of children, especially in the normal, and their preventive and remedial treatment; the mental hygiene of teaching and learning. *Section 1, B, I; Section 2, C, I. 3 s.h.*

MR. HOLSOPPLE

S304. The School as an Institution.—The place of school in society, its history and philosophy. This is one of the reading courses required for the Master of Education degree of all students beginning work after June 1, 1938. Selected problems guiding the reading of students will be discussed in class, and reading students are expected to attend the class from time to time. Other students may take the course for three semester hours' credit, as any other graduate course listed. *D, I; A, C, II (first three weeks). 3 s.h.*

MR. PUNKÉ

S305. The Nature, Function, and Reorganization of the Curriculum.—This is one of the reading courses required for the Master of Education degree of all students beginning work after June 1, 1938. Selected problems guiding the reading of students will be discussed in class, and reading students are expected to attend the class as suggested by the instructor. Other students may take the course for three semester hours credit, as any other graduate course listed. *A, I. 3 s.h.*

MR. CARR

Other courses accepted, not to exceed a total of six semester hours, as work in School Supervision are the following, when the student has the approval of his major professor: S234, S343, S363, listed under the division of Administration; S300, S208, S218, S258, S317, listed under Educational Psychology; S205, S206, S216, S226, S236, S246, S266, S276, listed under Secondary Education; and S207, S212, S237, S247, S257, listed under Elementary Education.

EDUCATIONAL PSYCHOLOGY (GRADUATE COURSES)

(The Master of Education degree is not offered in this division. Master of Arts candidates should choose Psychology for their minor subject. It will be observed that certain of the courses listed under Educational Psychology are also listed under Supervision, Secondary Education, or Elementary Education.)

S208. Mental Tests and Applications.—A study of the development of intelligence testing, the concept of general intelligence, various recent applications of mental tests, and training in the giving of individual tests. Prerequisite: course S258 or six semester hours of other work in educational psychology or psychology. *A, II. 3 s.h.* MR. ODELL

S209. Statistical Methods in Education.—*A, I. 3 s.h.* MR. ODELL

S212. Psychology of the Elementary School Subjects.—A study of the psychology of learning as applied to teaching the common-school subjects. *C, I. 3 s.h.* MR. WHEAT

S216. Psychological Principles of Secondary Education.—A study of adolescence and the psychology of learning as applied to teaching the principal high-school subjects. *B, I, II. 3 s.h.* MR. PUNKÉ (*first term*)
MR. BOND (*second term*)

S218. Educational Implications of Genetic Psychology.—A course tracing the development of the individual through the stages of growth and learning, with emphasis upon early and later childhood; the development of such behavior patterns as play, language, etc.; the process of socialization; and similar material of special significance to teachers in the elementary schools. An advanced section of S118, not open for enrollment to students who have credit for that course. Prerequisite: six semester hours of psychology or educational psychology. *C, I. 3 s.h.* MR. EASLEY

S227. Psychology of Learning: Problems.—The major problems related to the learning process will be examined, with the experimental literature bearing on them. The curves of learning and forgetting, the distribution of practice, economical methods of learning, and the transfer of training will be the major topics considered. *A, I. 3 s.h.* MR. EASLEY

S237. Investigations in Reading.—A summary of the more important scientific studies in reading; interpretation of the results in terms of aims, methods, materials of instruction, testing, diagnosis, and supervision; emphasis on problems requiring further investigation. *B, I, II. 3 s.h.* MR. DOLCH

S237A. Investigations in Reading: Primary Section.—A special section of S237 intended for teachers in the primary grades. *A, I. 3 s.h.* MR. DOLCH

S247. Investigations in Arithmetic.—An analytical survey of investigations in arithmetic, with three purposes in view: (1) to examine the techniques employed with respect to their adequacy as means of solving the problems attacked; (2) to test the validity of the results announced and the values of these results for the teaching of arithmetic; (3) to locate further problems in arithmetic in need of scientific research. *A, II. 3 s.h.* MR. DOLCH

S247A. Investigations in Arithmetic: Primary Section.—A special section of S247 intended for teachers in the primary grades. *C, I. 3 s.h.* MISS JOHN

S247B. Investigations in Arithmetic: Grammar Grade Section.—A special section of S247 intended for teachers in the grammar grades. *A, I. 3 s.h.* MISS JOHN

S257. Investigations in Language and Elementary School English.—*C, I. 3 s.h.* MR. EVANS

S258. Educational Measurements.—A study of the purposes and uses of standardized and informal tests and scales with special emphasis on their use in the improvement of instruction. *B, II. 3 s.h.* MR. ODELL

S258A. Educational Measurements in the Secondary Schools.—A special section of S258, emphasizing the secondary school. *B, I.* 3 s.h. MR. ODELL

S287. Problems of Mentally and Educationally Retarded Children.—*Section 1, A, I; Section 2, B, I.* 3 s.h. MR. WALLIN

S288. Problems of Mental Hygiene and Education.—*Section 1, B, I; Section 2, C, I.* 3 s.h. MR. HOLSOFFLE

S300. Introduction to Educational Research.—Primarily a pre-thesis writing course designed to be liberalizing as well as technical. The general purpose is to give the student an overview of research, acquaint him with the nature of research processes, and develop within him an appreciation of the essential characteristics of good research work. Recommended for students who intend to write theses in Education in 1941. Required of all candidates for the Master of Education degree who began their work since 1937 and to be included in their final examination on readings. *C, I, II.* 3 s.h.

MR. SCATES

S300X. Educational Research.—Thesis credit only. *D, I, II.* 3 s.h.

MR. SCATES

S317. The Psychological Principles of Education.—An advanced study of teaching, learning, and the learner. This is one of the reading courses required for the Master of Education degree of all students beginning work after June 1, 1938. Selected problems guiding the reading of students will be discussed in class. *B, I.* 3 s.h.

MR. WHEAT

SECONDARY EDUCATION (GRADUATE COURSES)

(Master's candidates in this division should elect minor work in their teaching subject, or in Psychology or Sociology, Master of Education candidates are required to elect their minor work in their teaching subject, and all of their work in Education must come from courses listed in this division.)

S205. Curriculum Problems in Secondary Education.—A consideration of practical problems of curriculum-making in the high school, in the light of the objectives of secondary education. *Section 1, A, I, II; Section 2, A, I.* 3 s.h.

MR. CHILDS (*section 1*)

MR. S. HAWKES (*section 2*)

MR. TANRUTHER (*second term*)

S206. Sociological Foundations of Secondary Education.—This is primarily a course in guidance. It considers the fundamental institutions of society and the problem of preparing youth to participate in them. The aims and objectives of the secondary school are considered in the light of the school as the strategic agent for guidance. Instead of a two-weeks conference on "Educational Guidance," such as was held in the summer of 1939, visiting lecturers and discussion groups will appear before the two sections of this class the first term. One section will be scheduled period B, beginning at 9:40, and the other period D, beginning at 2:15. *Students enrolled in either section will be expected to schedule no conflicting classes at either period B or D, because the two classes must be free to meet together when visiting lecturers and discussion groups participate in the program. Each class will be limited to a maximum of thirty students, and preference will be given students who have completed six or more hours in secondary education.* *Section 1, B, I, II; Section 2, D, I.* 3 s.h.

MR. P. H. GWYNN (*first term*)
MR. TANRUTHER (*second term*)

S216. Psychological Principles of Secondary Education.—*B, I, II. 3 s.h.*

MR. PUNKÉ (*first term*)

MR. BOND (*second term*)

S226. Teaching of History and the Social Studies.—A course for teachers of social studies in junior and senior high school. Discussions and collateral readings upon such topics as aims, tests for values, the social studies curriculum, classroom procedure, course and lesson planning, etc. *C, I. 3 s.h.*

MRS. HAWKES

S234. Secondary School Organization and Administration.—For first-term students, Section 1 recommended for principals of high schools, and teachers of five or more years' experience; Section 2 recommended for teachers of less than five years' experience. *Section 1, A, I; Section 2, C, I, II. 3 s.h.*

MR. HOWARD (*first term*)

MR. GOLDTHORPE (*second term*)

S234X. Thesis Seminar in Secondary Education.—*Schedule to be arranged, I, II (first three weeks).*

MR. CHILDS (*first term*)

MRS. HAWKES (*second term*)

S236. Problems in the Teaching of English in the Secondary School.—*B, I. 3 s.h.*

MR. EVANS

S246. The Teaching of High-School Mathematics.—Identical with Mathematics S204. *C, I. 3 s.h.*

MR. W. W. RANKIN

S266. The Teaching of High-School French.—Identical with French S218. *C, I. 3 s.h.*

MR. WEBB

S273. Problems of High-School Supervision.—*Section 1, A, I; Section 2, B, I; A, C, II (first three weeks). 3 s.h.*

MR. HIGHSMITH (*first term*)

MR. J. M. GWYNN (*second term*)

S276. The Teaching of High-School Science.—Discussion, based upon lectures and collateral reading, of such topics as aims, tests for values, the curriculum, classroom procedure, course and lesson planning in secondary school science. Prerequisite: at least eighteen semester hours of science in college. *C, I. 3 s.h.*

MR. SLAY

Other courses accepted, not to exceed a total of six semester hours, as work in Secondary Education are the following, when the student has the approval of his major professor: S233 or S233A, S287, S289, S209, S224, listed under the division of Supervision; and S208, S217, S218, S219, S258, listed under Educational Psychology.

ELEMENTARY EDUCATION (GRADUATE COURSES)

(Master's candidates in this division should take their minor work of six semester hours in Psychology, Educational Psychology, or an approved combination of the two, or in Child Welfare and Development—wholly in Sociology, or partly Sociology and Psychology, or Educational Psychology, if a satisfactory combination can be worked out. Master of Education candidates in this division must take fifteen semester hours of work described or listed under Elementary Education.)

S207. Technique of Teaching.—An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. A course primarily for those interested in the supervision of elementary school instruction. *C, II. 3 s.h.*

MR. BOND

- S212. Psychology of the Elementary School Subjects.—*C, I. 3 s.h.*
MR. WHEAT
- S218. Educational Implications of Genetic Psychology.—*C, I. 3 s.h.*
MR. EASLEY
- S222. The Curriculum and Materials of the Elementary Grades.—*Section 1, A, I; Section 2, B, I; Section 3, A, C, II (first three weeks). 3 s.h.*
MR. HILLMAN (*first term*)
MR. P. R. SPENCER (*second term*)
- S232. Elementary School Supervision.—*B, II. 3 s.h.* MR. OVERN
- S233A. Pupil Personnel Problems in the Elementary School: Guidance.—*Section 1, B, D, I (first three weeks); Section 2, C, I. 3 s.h.*
MISS STRANG (*section one*)
MR. OVERN (*section two*)
- S237. Investigations in Reading.—*B, I, II. 3 s.h.* MR. DOLCH
- S237A. Investigations in Reading: Primary Section.—*A, I. 3 s.h.*
MR. DOLCH
- S247. Investigations in Arithmetic.—*A, II. 3 s.h.* MR. DOLCH
- S247A. Investigations in Arithmetic: Primary Section.—*C, I. 3 s.h.*
MISS JOHN
- S247B. Investigations in Arithmetic: Grammar Grade Section.—*A, I. 3 s.h.*
MISS JOHN
- S257. Investigations in Language and Elementary School English.—*C, I. 3 s.h.* MR. EVANS
- S267. Studies in the Teaching of Elementary School Science.—Discussion, based upon lectures and collateral reading, of such topics as aims, tests for values, the curriculum, classroom procedure, course and lesson planning in elementary school science. Prerequisite: at least eighteen semester hours of science in college. *B, I. 3 s.h.* MR. SLAY
- S287. Problems of Mentally and Educationally Retarded Children.—*Section 1, A, I; Section 2, B, I. 3 s.h.* MR. WALLIN
- S288. Problems of Mental Hygiene and Education.—*Section 1, B, I; Section 2, C, I. 3 s.h.* MR. HOLSOPPLE
- S322. Seminar in Elementary Education.—Thesis students in elementary education should attach themselves to this course for supervision and residence credit. *C, I. 3 s.h.* MR. CARR

Other courses accepted, not to exceed a total of six semester hours, as work in Elementary Education are the following, when the student has the approval of his major professor: S224, S233 or S233A, listed under the division of Supervision; and S208, S217, S219, listed under Educational Psychology.

UNDERGRADUATE COURSES

(By permission Seniors may enter graduate courses numbered below 300. Attention is called to the fact that toward the A.B. degree not more than six semester hours of methods courses are allowed to count.)

- S58. The Learning Process.—A course in elementary educational psychology. *A, I. 3 s.h.* MR. WATSON

S68. Mental Hygiene of the School Child.—A course primarily for teachers in the elementary school. A study of personality factors as related to the adjustment and success of the school child; the foundations of motivation; typical problems of maladjustment; social heredity and its educational implications; variations in intelligence. *B, I. 3 s.h.* MR. GODARD

S83. Current Trends in American Public School Organization.—A study of current controversies and criticism bearing on the organization and administration of the public schools, recent developments in the organization of schools, and the theories underlying these developments. *B, I. 3 s.h.* MR. CURTIS

S101. Introduction to Teaching.—A survey of the work of the teacher, intended to assist the pupil in choosing intelligently some field of teaching work for future specialization. Topics: qualification and training of teachers, nature and aims of education, nature and purpose of public school curricula, nature of school matter and its relation to pupil activity, modern procedure in teaching. Old number, S61. *C, I. 3 s.h.* MR. DOTY

S103. School Organization and Administration for the Classroom Teacher.—A study of the problems of school organization, control, and administration as they arise in the work of the classroom teacher. *A, I. 3 s.h.* MR. ESKRIDGE

S117. Analysis of Study and Study Habits in the Elementary School Subjects.—A study of the available literature on study and study habits, with practical discussions, planned to meet the needs of teachers and supervisors in the elementary schools. *C, I. 3 s.h.* MR. CURTIS

S118. Educational Implications of Genetic Psychology.—A course tracing the development of the individual through the stages of growth and learning, with emphasis upon early and later childhood; the development of such behavior patterns as play, language, etc.; the process of socialization; and such similar material of special significance to teachers in the elementary schools. *B, I. 3 s.h.* MR. WATSON

S162. Social Studies in the Primary Grades.—A study of programs, principles, and procedures in the social studies in the primary grades, with more detailed methods of planning, selecting materials, and teaching specific units. *A, C, I (second three weeks). 3 s.h.* MRS. PORTER

S182. The Teaching of Geography.—Emphasis upon developing methods of reasoning with geographical materials. Diagnosis of specific difficulties of teaching geography and suggestions for remedial teaching. Recommended for teachers of two or more years' experience or persons who have had college courses in geography. (See Economics S115, S116.) *C, I. 3 s.h.* MR. GODARD

S192. Materials and Methods in the Primary Grades.—A study of curriculum problems in grades one to three; the theories underlying the organization of the integrated curriculum; the principles underlying large unit teaching; the environment as a source of materials for developing the curriculum; centers of interest around which units of work may develop; criteria for selection; selection and organization of materials; the organization of the curriculum around large units; checking the results against objectives and subject-matter requirements; technique of teaching large units, including the place of drill, the program of work, provision for individual differences, and the relationship of the various subjects to the units of work. An actual unit of work will be developed in detail for each grade level. *B, I; B, D, II (first three weeks). 3 s.h.* MISS MICHAELS (first term)
MISS MARKS (second term)

S197. Materials and Methods in the Grammar Grades.—Identical with S192 above, except that illustrative materials are chosen with the child of grades four to seven in mind. *A, I.* 3 s.h. MISS MICHAELS

Note.—A section of S197 will be offered as double course the first three weeks of the second term if demand justifies.

PUBLIC SCHOOL ART

A. Integrated Art in the Public School.—This course is offered to develop certain skills fundamental in the teaching of public school art as well as skills that will prove of help in teaching other subjects of the elementary school curriculum. Topics: color theory, design, perspective, representation, figure drawing, illustration, picture study, etc. Emphasis varies with the needs of the class. Media: tempera color, crayons, clay, etc. (*A required course in the Elementary Teaching group.*) *A, and 10:45-12:55, I (second three weeks).* 3 s.h. MRS. MASON

B. Industrial Art in the Public School.—Manipulation and work with clay, textiles, wood, paper, food, printing, etc., intended to give the child an acquaintance with the raw products of nature, and the changes made in them so that they may be more usable for food, clothing, shelter, utensils, tools, etc. Each student taking the course must complete a project upon the work of the grade in which she expects to teach. (*A required course in the Elementary Teaching group.*) *A, 10:45-12:55, II (first three weeks).* 3 s.h. MRS. ALSTON

HYGIENE AND HEALTH EDUCATION

S112. Personal and School Hygiene.—General, personal, and school hygiene with some instruction in anatomy and physiology; cause, transmission, and prevention of communicable diseases; the more common defects of school children; schoolhouse sanitation; medical inspection; etc. *B, D, I (first three weeks).* MISS GARDINER

S132A. Materials and Methods in Health Education: Primary Grades.—*A, I.* 3 s.h. MR. AYCOCK

S132B. Materials and Methods in Health Education: Grammar Grades.—A special section of S132 for teachers in the grammar grades. *C, I.* 3 s.h. MR. AYCOCK

Note.—Both sections of S132 work out programs of physical and health education in the grades.

NOTE AS TO UNDERGRADUATE PHYSICAL EDUCATION

Undergraduate students in Trinity College are required to take six semester hours of physical education, divided into four courses taken one each term during their first two years in college. Among the courses offered to meet the physical education requirements are Swimming 13 (for beginners), and Swimming 42 (for more advanced students). By request, these courses are offered for men the first term this summer on the West Campus, under the direction of Swimming Coach W. S. Persons. Course 13 is scheduled for Period 1, and course 42 for Period 2. Each course carries physical education credit of one and one half semester hours, is limited to a maximum enrollment of thirty students and involves a special fee of \$5.00. Similarly, arrangements can be made for women on the East Campus the first term of Summer School if there is sufficient demand.

ENGINEERING

C.E. S10. Plane Surveying.—Use of instruments; transit, stadia, compass, and plane-table surveying; simple triangulation; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, and departures; areas by planimeter; methods of plotting; survey and plot of sections of the campus by stadia, and transit and tape. *Three weeks, nine hours a day, beginning May 30. 3 s.h.*

MR. BIRD, MR. W. H. HALL, AND MR. WILLIAMS

C.E. S110. Plane Surveying.—A special section of C.E. S10 intended for students in Forestry and others of advanced standing. *Three weeks, nine hours a day beginning May 31. 3 s.h.*

MR. BIRD

ENGLISH

Those who wish to become candidates for the Master's degree in English are expected to have at least twelve semester hours in courses above sophomore requirements. The Department reserves the right to require additional course work on the graduate level if the work of the student in his first term indicates inadequate preparation. For admission to candidacy with a major in American Literature, the student must present courses S137-S138 or an acceptable equivalent in American Literature either as part of the twelve stipulated above or in addition to them.

Master's candidates in English are required to complete at least three semester hours in Chaucer or certain other designated courses. Master's candidates who have completed as many as twelve semester hours of graduate work should take also the bibliography course, S301, at their earliest opportunity.

All graduate students in English who enter the Summer School after June 1, 1940, must take a general examination set by the advisory committee of the Department before they will be admitted to candidacy for a degree. This examination is held at the opening of the first term of Summer School each year. It must be passed by every student not later than the beginning of his third term of summer school work.

S1. English Composition.—A course in the fundamentals of English composition, oral and written, with special attention to sentence structure, syntax, common errors, etc. Frequent themes. *A, II. 3 s.h.*

MR. HARWELL

S2. English Composition.—A continuation of course S1. *C, II. 3 s.h.*

MR. HARWELL

S56. Representative English Writers.—Fielding, Boswell, Goldsmith, Sheridan, Byron, Carlyle, Thackeray, and Strachey, will be studied. *B, II. 3 s.h.*

MR. SANDERS

S120. History of the Theater.—History of the theater from the time of the Italian Renaissance to the present day. *B, I. 3 s.h.*

MR. WEST

S123. Shakespeare.—The histories and comedies. (This course duplicates S124 as offered in the summer of 1937 and preceding summers.) *B, I. 3 s.h.*

MR. MITCHELL

S124. Shakespeare.—Introduction and detailed study of the tragedies. (This course duplicates S123 as offered in the summer of 1937 and preceding summers.) *C, I. 3 s.h.*

MR. MITCHELL

S125. Early Nineteenth-Century Literature.—This course consists of representative English writers in the period 1789-1832, with emphasis upon Coleridge, Wordsworth, Hazlitt, and Scott. *C, II. 3 s.h.*

MR. SANDERS

S126. Early Nineteenth-Century Literature.—Continuation of course S125, emphasizing Byron, Shelley, and Keats. *A, C, II (first three weeks).* 3 s.h. MR. PATTON

S137. American Literature prior to 1850.—This course consists of wide reading in American prose and poetry produced prior to 1850. *A, I.* 3 s.h. MR. HURLEY

S138. American Literature, 1850-1900.—Continuation of course S137. *C, I.* 3 s.h. MR. HURLEY

S139. The Speaking Voice.—This course gives training in placement, pitch, range, and diction for use in professional work and in daily conversation. *C, I.* 3 s.h. MR. WEST

S145. English Literature, 1832-1900.—A study of representative English poets of the period, with special emphasis on Tennyson, Browning, and Arnold. *A, I.* 3 s.h. MR. BLACKBURN

S163. Folk Background of Literature.—A special section of S213 for undergraduate students. The reading of fables, tales, legends, nursery rhymes, ballads, and songs. Correlation with forms of individual literature. Attention given to North Carolina and Southern folklore. Lantern slides and illustrative singing. *A, I.* 3 s.h. MR. J. M. CARPENTER

S203. Chaucer.—A survey of his life and principal poems, the development of his art, the sources and social background of his poetry. *C, I.* 3 s.h. MR. HUGHES

S211. English Non-Dramatic Literature, 1600-1650.—A study of English prose and verse to the conclusion of the Civil War. The writings of Bacon, Donne, Browne, and other important writers will be stressed. (Not open for enrollment to students who had English S211A in the summer of 1939.) *B, I.* 3 s.h. MR. ALLEN

S213. Folk Background of Literature.—The rapid reading of fables, tales, legends, nursery rhymes, popular ballads, and other folk songs. Correlation with forms of individual literature. Special attention given to North Carolina and Southern folklore. Lantern slides and illustrative singing. *C, I.* 3 s.h. MR. J. M. CARPENTER

S215. Elizabethan Drama.—A study of Shakespeare's predecessors and early contemporaries. *B, I.* 3 s.h. MR. H. SPENCER

S216. The English Drama in the Reign of James I.—A study of the later contemporaries of Shakespeare, with emphasis upon the plays of Ben Jonson. *C, II.* 3 s.h. MR. H. SPENCER

S217. Spenser: "The Faerie Queene."—A study of the poem in detail and a survey of its interpretation from Warton's *Observations* to the present time. *A, C, II (first three weeks).* 3 s.h. MR. HUGHES

S218. Milton: "Paradise Lost," "Paradise Regained," and "Samson Agonistes."—Problems in their interpretation. *D, II.* 3 s.h. MR. GILBERT

S219. English Literature, 1700-1750.—The main documents in English prose and poetry of this period will be reviewed, with emphasis on the work of Defoe, Swift, Steele, Addison, Pope, James, Thomson. *A, I.* 3 s.h. MR. IRVING

S223. Survey of Early Nineteenth-Century Literature.—*A, I. 3 s.h.*

MR. SOLVE

S225A. Early Victorian Literature: Browning.—A study of Browning's poetry and its contributions to nineteenth-century thought. Special attention will be given to the shorter poems, four books of the *Ring and the Book*, and three of the dramas. *A, I. 3 s.h.*

MR. GRIGGS

S226. Later Victorian Literature, 1850-1900.—A study of the major writers of this period. Special attention will be given to Arnold, Browning, Rossetti, Swinburne, Ruskin, and Pater. *A, II. 3 s.h.*

MR. GRIGGS

S228. Literary Criticism.—A history of literary criticism after 1700. *D, I. 3 s.h.*

MR. GILBERT

S229. American Literature, 1800-1870: The New England Writers.—A survey of the principal writers of the period, including Emerson, Hawthorne, Longfellow, Whittier, Lowell, Holmes, and Thoreau. *A, I. 3 s.h.*

MR. ELLIS

Note.—This course will not conflict with English S231A below.

S230. American Literature, 1800-1870: Middle Atlantic and Southern.—A survey of the principal writers of the period, including Poe, Irving, Cooper, Melville, and Simms. *B, II. 3 s.h.*

MR. HUBBELL

S231A. Special Studies in American Literature: The Rise of National Literary Consciousness, 1780-1820.—Franklin, Paine, the Hartford Wits, the Federalist and Democratic political writers, and the four pioneers in poetry, novel, drama, and essay: Freneau, C. B. Brown, Dunlap, and Dennie. *C, I. 3 s.h.*

MR. ELLIS

S233. American Literature since 1870: Part I.—A survey of the principal writers of the earlier part of this period, including Whitman, Mark Twain, and Lanier. *B, I. 3 s.h.*

MR. MABBOTT

S234. American Literature since 1870: Part II.—The local colorists, Moody, Garland, Dreiser, the Poetical Renaissance 1912. *C, II. 3 s.h.*

MR. BROWN

S237. Shakespeare's Earlier Plays.—*C, I. 3 s.h.*

MR. H. SPENCER

S238. Shakespeare's Later Plays.—*B, II. 3 s.h.*

MR. H. SPENCER

S243. History of the English Language.—Identical with English S211 as given in 1937. *B, I. 3 s.h.*

MR. SPARGO

S257. The American Novel, 1789-1860.—A study of American fiction in the main lines of its development from the beginnings to the Civil War. Attention will be given to the influence of Richardson and Sterne upon the novel of morality and sensibility in the eighteenth century, the establishment of the historical romance, the vogue of the romance of adventure, and the rise of realism in novels of familiar life. In addition to the works of the major novelists, Brown, Cooper, Hawthorne, and Melville, emphasis will be placed upon the domestic, religious, and humanitarian novels of the 1840's and 1850's. *A, II. 3 s.h.*

MR. BROWN

S268. Milton: Minor Poems and Principal Pamphlets.—*B, I. 3 s.h.*

MR. HUGHES

S271. Non-Dramatic English Literature of the Sixteenth Century.—This course attempts to plot the current of sixteenth-century ideas as they appear in prose and verse. Emphasis will be placed on the cosmographical, ethical, political, and aesthetic notions of the era. *A, I. 3 s.h.*

MR. ALLEN

S301. Bibliography and Methods of Research.—This course or its equivalent is required of all candidates for higher degrees. *A, I.* 3 s.h.

MR. SPARGO

S301A. Bibliography in American Literature.—*B, I.* 3 s.h.

MR. GOHDES

S304. Studies in Poe.—A study of his life and writings, with attention to text, sources, and interpretation. *D, I.* 3 s.h.

MR. MABBOTT

S307. Seminar in American Literature Prior to 1870.—*Schedule to be arranged, II.* 3 s.h.

MR. HUBBELL

Note.—Enrollment in S307 and S308 is drastically limited, and preference is given to thesis students. Enrollment by permission of the instructor.

S308. Seminar in American Literature since 1870.—*Schedule to be arranged, I.* 3 s.h.

MR. GOHDES

S323. Studies in Coleridge.—Coleridge's contribution to romantic thought. An attempt will be made to study the major influences upon Coleridge's thought. Each student will be expected to give at least one oral report and to prepare a written paper. Students writing theses in this field will be given preference as to enrollment the first term. *B, I, II.* 3 s.h.

MR. GRIGGS

S324. Studies in Shelley.—(Not open for enrollment to students who have had S240 in 1936.) *C, I.* 3 s.h.

MR. SOLVE

S329. Seminar in Sixteenth- and Seventeenth-Century English Literature.—Open by permission of the instructor to students who have had at least one course in the drama or other literature of the period. The Restoration will not be dealt with. Students writing theses on subjects from these centuries should register for this course. *Schedule to be arranged. I, II.* 3 s.h.

MR. GILBERT

S332. Seminar: Studies in English Literature, 1750-1800.—*B, I.* 3 s.h.

MR. IRVING

FORESTRY

Candidates for the Bachelor of Science degree with a major in Forestry are required to take Civil Engineering S110 (Plane Surveying) in Summer School at the close of their Junior year. This course is listed under Engineering, page 45, this bulletin. Candidates in Forestry are also expected to take the following courses after completing the required work in Engineering:

S150. Forest Surveying.—The application of plane surveying to forest problems. Practice in making boundary and topographic surveys of forested tracts, using both intensive and extensive methods. Work includes use of transit, level, traverse board, topographic abney and slope tape, and aneroid barometer. Prerequisite: Civil Engineering S110, Plane Surveying, or equivalent. *Five weeks, eight hours a day, beginning June 21.* 5 s.h. (w)

MR. MAUGHAN

S151. Forest Mensuration.—Field studies in methods of measuring content and growth of trees and forest stands; practice in timber estimating, log scaling, use of mensurational instruments, and the collection of basic data. *Four weeks, eight hours a day, beginning July 26.* 4 s.h. (w)

MR. SCHUMACHER

FRENCH

S1. Elementary French.—Grammar; translation from French into English and English into French; pronunciation, sight translation, and conversation. *A, C, I (first three weeks).* 3 s.h.

MR. DOW

S2. Elementary French.—Continuation of course S1. *A, C, I (second three weeks).* 3 s.h. MR. DOW

S3. French Prose.—Reading and translation, exercise in grammar review and verb drill. Prerequisite: French S1-S2 or two years of high-school French. *A, I.* 3 s.h. MISS RAYMOND

S4. French Prose.—Reading and translation, writing in French at dictation, and aural drill. Prerequisite: French S3. *C, I.* 3 s.h. MISS RAYMOND

S51. Introduction to French Literature.—Prerequisite: French S3-S4 or equivalent. *A, II.* 3 s.h. MR. BRIDGERS

Note.—Students who completed their second-year college French more than two years ago should check carefully with the instructor before entering S51.

S52. Introduction to French Literature.—Prerequisite: French S51. *C, II.* 3 s.h. MR. BRIDGERS

S213. French Prose and Poetry of the Seventeenth Century.—*A, I.* 3 s.h. MR. WALTON

S218. Materials and Methods.—History of the teaching of French; methods; the course of study; analysis of representative texts; objectives in the light of teaching conditions, equipment, and future application. *C, I.* 3 s.h. MR. WEBB

S228. Survey of French Poetry, 1400-1850.—*B, II.* 3 s.h. MR. COWPER

S231. Rousseau and the Beginnings of Romanticism.—*C, II.* 3 s.h. MR. COWPER

S315. Seminar in the Modern French Novel.—Designed for students who wish to begin a thesis in this field, or who wish to do special work in the novel. Thesis or course credit. *D, I.* 3 s.h. MR. JORDAN

S350. Seminar in Nineteenth-Century French Criticism.—A study of the leading critics from Sainte-Beuve to the end of the century. *B, I.* 3 s.h. MR. JORDAN

GEOGRAPHY

See courses listed under Economics.

GEOLOGY

S175. Field Course in Geology.—Prerequisite: Geology 51-52 or its equivalent, and the permission of the instructor. *Four weeks, I.* 4 s.h.

MR. W. BERRY

This course is offered tentatively, provided as many as eleven men are accepted by the instructor and make a deposit of \$145.00 before May 4. The trip is limited to fifteen men. Any over the fifteen maximum will be listed in order of registering and can fill any withdrawals that occur in the group, with the understanding that for those on the waiting list deposit will be refunded if none of the first fifteen accepted withdraw. It is planned for the group to leave Durham by automobile caravan June 6 and visit many points of geologic interest from Durham by way of southwestern North Carolina, across southern Tennessee, Arkansas, Oklahoma, the Texas Panhandle, New Mexico, Arizona, to the Grand Canyon and north by way of Great Salt Lake to the Yellowstone and east across the glaciated areas and then over Kentucky and back to Durham. Mines, quarries, oil fields, fossil localities, and the like will be visited and discussed. A written report will be required before credit is given. Students accepted for the trip must have had smallpox vaccination

and typhoid and paratyphoid injections, and be in good health. The University cannot accept responsibility for sickness or accidents, although precaution will be taken for the common good. Tents and cots will be provided, but eating will be in restaurants. The expense of the trip will be covered by the deposit of \$145.00, which allows \$1.00 per day for food. The student is privileged to spend as much more as he wishes.

Note.—If there are vacancies after April 1, students of junior standing and superior record in other laboratory sciences may be accepted by the instructor even though they do not have the geology prerequisite.

GERMAN

S1. Elementary German.—The fundamentals of grammar and pronunciation; vocabulary drill, translation, and dictation. Emphasis upon a sound reading knowledge of the language and individual achievement. *A, C, I (first three weeks).* 3 s.h.
MR. F. E. WILSON

S2. Elementary German.—The equivalent of the second college semester of German; intensive reading of graded material; grammar and vocabulary drill; dictation and sight translation. *A, C, I (second three weeks).* 3 s.h.
MR. F. E. WILSON

S115. German Drama of the First Half of the Nineteenth Century.—A study of leading dramatists, beginning with Heinrich von Kleist. *A, I.* 3 s.h.
MR. KRUMMEL

S116. German Drama of the Second Half of the Nineteenth Century.—A study of leading dramatists, closing with Gerhart Hauptmann. *B, I.* 3 s.h.
MR. KRUMMEL

GOVERNMENT

See courses listed under Political Science.

GREEK LITERATURE

(In English Translation)

S121. Homer.—The purpose of this course is to give a general survey of the life and civilization of the Greeks, especially to those who have never studied the language but wish to become acquainted with some of the choicest portions of the literature by the use of translation. It is, however, open as an elective to all Juniors and Seniors, whether they know Greek or not. The *Iliad* and *Odyssey* are read in translation and illustrated with stereopticon views of the excavations and discoveries at Troy and other cities of the Mycenaean Age. Reports on assigned topics required. *D, I; A, C, II (first three weeks)* 3 s.h.
MR. JERNIGAN

S122. Greek Literature: The Great Tragedies.—The purpose of this course is similar to that of course S121. Many of the extant plays of Aeschylus, Sophocles, and Euripides are studied in English translations, and reports on assigned topics are required. *B, I.* 3 s.h.
MR. JERNIGAN

HISTORY

For admission to candidacy for a Master's degree in History the student must present a total of eighteen semester hours of prior work in History, of which at least six must be in American History if he plans to take his major work in that field. Before enrolling for thesis supervision, candidates for the Master's degree are required to complete at least three semester hours of seminar work and are strongly urged to enroll for this work in the second term of their attendance in the Summer School. (See courses numbered 300 or above.)

S51. Modern and Contemporaneous Europe.—A careful survey is made of European history from 1500-1814, with especial attention given to political developments. Passing attention is given to religious, economic, social, and cultural movements. *B, I.* 3 s.h. Mr. McCLOY

S52. Modern and Contemporaneous Europe.—A survey of European history since 1814. *C, I.* 3 s.h. Mr. McCLOY

S91. Political and Social History of the United States to 1850.—A general survey of the political and social development of the United States. Prefaced by a brief review of the Colonial period, this course covers the period from the American Revolution through the Compromise of 1850. *A, I, II.* 3 s.h.
Mr. CLARK (*first term*)
Mr. MABRY (*second term*)

S92. Political and Social History of the United States since 1850.—A continuation of S91. The course concludes with an introduction to problems in American history since the World War. *B, I, II.* 3 s.h.
Mr. CLARK (*first term*)
Mr. MABRY (*second term*)

S101. Development of Western European Civilization to about 500 A.D.—A study of the development in Western Europe of the familiar institutions and culture of modern society as developed from ancient times through the Roman period. *A, I.* 3 s.h. Mr. MANCHESTER

S102. Development of Western European Civilization from 500 to 1563 A.D.—Continuation of course S101 through the Renaissance, Reformation, and Catholic Counter-Reformation. Students may enter this course independently of S101. *C, I.* 3 s.h. Mr. MANCHESTER

S105. English Constitutional History to 1485.—Beginning with the influence of the Norman Conquest, 1066, consideration is given to the evolution of institutions having significance in the later development of the English constitution, such as political feudalism, the crown and its struggles with the barons, the common law and the central courts, the church in its relation to the state, and Parliament. *C, I.* 3 s.h. Mr. HAMILTON

S203. The Union, Confederacy, and Reconstruction.—The subjects considered are the rise of secession, the constitutional and economic problems of the Union and Confederacy, and the political and economic adjustments during Reconstruction. *C, II.* 3 s.h. Mr. WOODY

S206. English History since 1485.—The subject matter of this course will be adapted to the needs and interests of the class, but will include the growth of nationalism under the Tudors; the triumph of Parliament in the seventeenth century; the ruling class in the eighteenth century; the cabinet government of the nineteenth century; selected social phases of the periods of Elizabeth, Anne, the Industrial Revolution, and Victoria; twentieth-century development through the abdication of Edward VIII, and the foreign policy of Chamberlain. *B, I.* 3 s.h. Mr. HAMILTON

S208A. American Social History to 1850.—This course includes an analysis of American society in the late Colonial period, a survey of the social effects of the American Revolution, an account of early attempts to achieve a distinctive national culture, and a summary of the reform movements of the 1830's and 1840's. Especial attention is given to the manners and morals, interests and amusements of the average American. *C, I.* 3 s.h. Mr. ROBERT

S208B. American Social History since 1850.—Among the topics presented are sectional variations in American life in the 1850's, social readjustments caused by civil conflict and Reconstruction, modifications in American culture as a result of industrialization and urbanization, the social effect of twentieth-century inventions, and the impact on American society of the World War and the depression. *D, I.* 3 s.h.

MR. ROBERT

S210. Political and Constitutional History of the United States, 1820-1850.—A study of the men and measures that shaped American political thought and action of this period, with some attention to the development of processes for fashioning public opinion. Much use will be made of biography. *B, II.* 3 s.h.

MR. C. H. SMITH

S213. Recent History of the United States.—This course emphasizes the period since the Spanish-American War. *A, I.* 3 s.h.

MR. CALLCOTT

S215. History of the United States' Foreign Policy prior to 1876.—*B, I.* 3 s.h.

MR. CALLCOTT

S216. History of the United States' Foreign Policy since 1876.—*C, I.* 3 s.h.

MR. CLYDE

S217. Europe, 1870-1914.—International relations since the Franco-German War; special emphasis upon the underlying economic and political influences, with emphasis upon England. *C, II.* 3 s.h.

MR. SCOTT

S218. Europe since 1914.—A study of the World War, the Paris Peace Conference, the international aftermath of the war, and the recent internal developments in the major states of Europe. *A, I, II.*

MR. CARROLL (*first term*)

MR. SCOTT (*second term*)

S231. The Hispanic Colonies of the New World.—The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. *C, I.* 3 s.h.

MR. LANNING

S236. The South in Federal Politics, 1789-1860.—*B, I.* 3 s.h.

MR. OWSLEY

S237. Social and Intellectual Development of the Old South.—Consideration will be given to conditions in the South in respect to slavery, agriculture, manufacturing, transportation, education, religion, science, and literature. *A, I.* 3 s.h.

MR. STEPHENSON

S245. History of the United States: The Federal Period, 1783-1815.—A study of the Confederation, the formation and ratification of the Federal Constitution, the establishment of the new government, Jeffersonian democracy, and the Second War for American Independence. *B, I.* 3 s.h.

MR. NEWSOME

S246. History of the United States: The Middle Period, 1815-1860.—A study of the westward movement, Jacksonian democracy, nationalism and expansion, state rights and sectionalism. *C, I.* 3 s.h.

MR. NEWSOME

S306X. Thesis Seminar in Southern History.—Open only to students who have theses in process or have completed the required courses in American History for the Master's degree. *Residence credit only.* *C, I.*

MR. STEPHENSON

S315. Seminar in Southern History.—Selected topics in the development of the Southern region, chosen from year to year in different periods in its development. *A, I, II.* 3 s.h.

MR. OWSLEY (*first term*)

MR. WOODY (*second term*)

S317. Seminar in Modern European History.—Directed research in problems relating to the history of Europe in the nineteenth century. *B, I.* 3 s.h.

MR. CARROLL

S325-S326. British Nationality and Public Opinion.—A study of the pressure techniques used by the various leaders and groups that have contended for power in England since the sixteenth century. The work will consist of lectures and a seminar for the supervision, criticism, and discussion of the research paper which each student is required to submit and which constitutes his work in the course. *B, C, I.* 6 s.h.

MR. LAPRADE

S330. Seminar in Jacksonian Democracy, 1824-1837.—Directed investigation of questions relating to the course theme, with class reports. (Students enrolling in this course should have credit for or be enrolled in S210.) *A, II.* 3 s.h.

MR. C. H. SMITH

S333. Studies in Hispanic-American History and Related Fields.—Prerequisite: History S231 or S232 and S234. Enrollment is limited to twelve students. Students writing theses under Dr. Lanning's direction will attach themselves to this course. *D, I.* 3 s.h.

MR. LANNING

S343. Seminar in the History of American Foreign Relations and the Far East.—*A, I.* 3 s.h.

MR. CLYDE

MATHEMATICS

For admission to candidacy for the degree of Master of Arts with major in Mathematics, a student must, besides meeting the University requirements for admission to the Graduate School, have completed a minimum of twenty-four semester hours of course work in mathematics or related fields. This course work must be approved by the Department through the Director of Graduate Studies, Professor J. J. Gergen. It must include differential and integral calculus and an additional six semester hours of work in mathematical courses of at least junior level.

To obtain the degree, a candidate must, besides meeting the University requirements, relating to language, credits, thesis, and residence, specialize in one of the following divisions of mathematics: algebra, analysis, geometry, or applied mathematics. In his division of specialization he must write his thesis and complete at least twelve semester hours of course work. To assist students in meeting the thesis requirement, the Department offers a thesis seminar (course S389X-S390X) in which supervision of thesis writing is available in one or more of the divisions. The scope of the seminar is announced each year in this bulletin.

Each student should, as early as possible in his graduate work, discuss his program with Professor Gergen or his representative.

S204. Teaching of Mathematics.—Fundamental processes, methods of study, mathematical literature, content of courses, applications, correlation of different branches. Prerequisite: integral calculus. *C, I.* 3 s.h.

MR. W. W. RANKIN

S205. Modern Developments in Mathematics.—Historical survey of mathematics, with special reference to discoveries of the last one hundred years and their significance from the standpoint of elementary mathematics. *D, I.* 3 s.h.

MR. ROBERTS

S228. Number Theory.—Divisibility and Euclid's algorithm, properties of prime numbers, arithmetic functions, congruences, quadratic residues. Uspensky and Heaslet, *Elementary Number Theory*, New York, 1939. Prerequisite: integral calculus. *C, I.* 3 s.h.
MR. WARD

S231. Differential Equations.—Solution of elementary types, formation and integration of equations arising in applications. Kells, *Differential Equations*, New York, 1935. Prerequisite: integral calculus. *C, II.* 3 s.h.
MR. ELLIOTT

S235. Modern Algebra.—Groups, rings, fields, polynomials in several indeterminates, reducibility. MacDuffee, *An Introduction to Abstract Algebra*, New York, 1940. Prerequisite: differential calculus. *A, I.* 3 s.h.
MR. CARLITZ

S236. Modern Algebra.—Matrices, quadratic and bilinear forms, pairs of quadratic forms. Text as for S235. Prerequisite: differential calculus. *B, II.* 3 s.h.
MR. THOMAS

S250. Modern Geometry.—Properties of the triangle; transversals; harmonic properties of figures; poles; polars; inversion. Johnson, *Modern Geometry*, New York, 1929. *B, I.* 3 s.h.
MR. CARLITZ

S271. Introductory Topology.—Topological properties of Euclidean spaces, set-theoretic and combinatorial methods. Prerequisite: integral calculus. *C, I.* 3 s.h.
MR. ROBERTS

S283. Fourier Series and Spherical Harmonics.—Fourier series and integrals, Legendre polynomials, spherical harmonics, Bessel functions. Applications to mathematical physics. Prerequisite: integral calculus. *A, II.* 3 s.h.
MR. MILES

S331. Complex Variable.—Complex numbers, analytic functions, elementary functions, conformal mapping, infinite series, Cauchy's theorem and its applications. Osgood, *Functions of a Complex Variable*, New York, 1938. Prerequisite: S239-S240 (Advanced Calculus) or the equivalent. *B, I.* 3 s.h.
MR. WARD

S332. Complex Variable.—Riemann surfaces, residues, infinite products, analytic continuation, logarithmic potential. Text as for S331. Prerequisite: S331 or the equivalent. *C, II.* 3 s.h.
MR. MILES

S389X. Thesis Seminar.—Supervision of individual theses in algebra, analysis, and geometry. Students should consult the Director of Graduate Studies or his representative before registering. *Thesis credit only. Schedule to be arranged, I.*
MR. CARLITZ, MR. ROBERTS, AND MR. WARD

S390X. Thesis Seminar.—Supervision of individual theses in algebra, analysis and applied mathematics. Students should consult the Director of Graduate Studies before registering. *Thesis credit only. Schedule to be arranged, II.*
MR. GERGEN AND MR. THOMAS

MUSIC

S11. Fundamentals of Public School Music.—The elements of harmony, rhythm, and form. The visual and aural recognition of scales, intervals, triads, and seventh chords and their functions in relation to the system of tonality. Harmonization of melodies. Development of rhythmic discrimination. *A, C, I (first three weeks).* 3 s.h.
MR. BRUINSMA

PHYSICS

For admission to candidacy for a Master's degree with major in Physics, students must have completed a minimum of twelve semester hours of Physics. This course work, together with the work in the field of the proposed minor, must be approved by the Department through the Director of Graduate Studies.

S1-S2. General Physics.—This course traces historically and experimentally the development of great principles. It stresses neither mathematical processes nor exact measurements. Three-hour recitation and two-hour laboratory. *Lectures, 1, 2, 3; laboratory, 2:00 to 4:00 P.M. daily, I (June 6 to July 23.) 8 s.h. (w) (Laboratory fee, \$4.00.)*

MR. D. W. CARPENTER, MR. RICHARDS, AND MR. WOLLMAN

S18. Physics for Engineers.—A course covering the field of general physics with emphasis on fundamental principles. Open only to engineering students. *Lectures 1, 2, and 3; three weeks beginning June 21. 3 s.h.*

MR. MOUZON

(Not offered unless as many as ten students register before May 1.)

S106. Photography.—A practical course on the making and processing of photographs and the application of photography to the sciences and arts. In general, each student will be expected to supply his own camera and film. One-hour lecture and one three-hour laboratory, daily. *Lectures, A; laboratory, 9:30 to 12:30, II (first three weeks.) 3 s.h. (w) (Laboratory fee, \$5.00.)*

MR. BONNER

S203. Analytical Mechanics.—Geometry of motion; kinematics of a particle and of a rigid body; statics; relative motion; general principles of mechanics. *Lectures, B, daily; laboratory 2:00 to 5:00 P.M. two to three periods per week, I. 3 s.h. (Laboratory fee, \$3.00.)*

MR. HEBB

S204. Analytical Mechanics.—Continuation of Physics S203. *Lectures, C, daily; laboratory 2:00 to 5:00 P.M., two to three periods per week, II. 3 s.h. (Laboratory fee, \$3.00.)*

MR. MOUZON

S353X. Research Seminar.—Thesis students and others who are properly qualified may carry on research work under the direction of members of the staff. Each student must have the approval both of the Director of Graduate Studies and of the instructor who supervises the problem. *Schedule to be arranged, I. 2 to 6 s.h.*

MR. NIELSEN, MR. MOUZON, MR. BONNER, AND MR. HEBB

POLITICAL SCIENCE

S61. American Government and Politics.—A study of the American political system, including the organization and functioning of national, state, and local government in the United States. *A, I, II. 3 s.h.*

MR. GIBSON (*first term*)

MR. SIMPSON (*second term*)

S62. American Government and Politics.—Continuation of S61. *C, I, II. 3 s.h.*

MR. GIBSON (*first term*)

MR. SIMPSON (*second term*)

S227. International Law.—Elements of international law of peace, particularly as interpreted and applied by the United States. *C, II. 3 s.h.*

MR. R. R. WILSON

S228. International Law.—Rules relating to state responsibility, international adjudications, war and neutrality. (Not open for enrollment by students who have not had the equivalent of S227, unless they are also enrolled in that course.) *B, II. 3 s.h.*

MR. R. R. WILSON

S230. American Political Institutions.—A study of the formation and development of institutions of the national government in the United States, with historical and analytical treatment. *A, I. 3 s.h.* MR. R. S. RANKIN

S241. The Administrative Process.—The function and theory of organization, delegated legislation, administrative adjudication, the control of administration, and special problems in economic balancing and proprietary activities. *A, I. 3 s.h.* MR. HART

S244. Administrative Law.—The law of the administrative process, including the nature of regulatory authority, the status and liability of public officers, administrative tribunals, and judicial review of administrative action. *C, I. 3 s.h.* MR. HART

S291. Municipal Government.—A study of general problems relating to the structural system and activities of municipalities in the United States. *B, I. 3 s.h.* MR. R. S. RANKIN

PSYCHOLOGY

S101. Introduction to Psychology: General Principles of Mental Activity and Growth.—Lectures, demonstrations, prescribed readings, and reports. *A, I. 3 s.h.* MR. PRATT

S201. Social Psychology.—A study of the process of the socialization of the individual and of the psychological mechanisms involved in social control. Lectures, readings, and reports. *B, II. 3 s.h.* MR. ADAMS

S207. Psychology of Thinking, Memory, Perceiving.—A study of various kinds of thinking, remembering, and perceiving activities with reference to the basic processes involved and their determining conditions. The roles of the factors of organization, meaning, and motive as studied in humans are especially considered. *B, I. 3 s.h.* MR. ZENER

S226. Contemporary Schools of Psychology.—A comparative survey of the major current systematic approaches to psychological problems. The types of explanation and interpretation characteristic of the different schools are considered in the light of their actual contributions to psychological facts, methods of investigation, and possibilities of application to practical problems. *C, I. 3 s.h.* MR. ZENER

S315. Child Psychology.—A study of experiments bearing upon the structure of the psychological person and of its psychological environment, and the character of the changes they undergo in the course of maturation, together with certain implications of these changes for the mental hygiene and pedagogy of childhood. Discussions of theory of compensation, psychological induction, learning, and various other phenomena. Lectures, with motion-picture demonstrations of environmental changes in child behavior and development. *C, II. 3 s.h.* MR. ADAMS
(Not open to those who have had S215 in preceding summers.)

RELIGION

S51. The History of the Hebrew People.—Survey of the contents of the historical and prophetic books of the Old Testament with particular reference to literary, historical, and religious values. *B, I. 3 s.h.* MR. MYERS

S52. New Testament Literature.—A study of the literature of the New Testament, its historical background, and its religious value. *C, I. 3 s.h.* MR. MYERS

S204. Christian Ethics.—Historical and systematic study of Christian conceptions of the moral life and its problems. *A, I.* 3 s.h.

MR. H. S. SMITH

S281. The Nature and Early Development of Religion.—Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. *B, I.* 3 s.h. MR. CANNON

S285. The Religions of the Far East.—A study of the religious systems of China, Korea, and Japan. (Identical with S286 as offered in the summer of 1938.) *A, I.* 3 s.h.

MR. CANNON

S368. Seminar: American Religious Thought.—Selected problems. Thesis students will be given preference in enrollment. *C, I.* 3 s.h.

MR. H. S. SMITH

The following courses will be given in the Junaluska School of Religion, Lake Junaluska, North Carolina, July 15 to August 24, 1940:

S301. Old Testament Theology. MR. RUSSELL

S311. Life and Teachings of Jesus. MR. RUSSELL

S323. Christian Thought since the Reformation. MR. OUTLER

S328. Current Theology. MR. OUTLER

S335. Modern Religious Leaders. MR. GARBER

S367. The Curriculum in Religious Education. MR. THOMPSON

S368. Worship and Training in Worship. MR. THOMPSON

S381. Missions in the Modern World. MR. CLARK

S386. Missionary Promotion. MR. CLARK

For the work at Junaluska credits of three semester hours per course, not to exceed a maximum of six semester hours during the six-weeks term, are allowed qualified students toward the A.B. and B.D. degrees. For admission students should have the equivalent of senior standing in a standard college.

For bulletin and other information, address Professor Paul N. Garber, Director Junaluska School of Religion, Duke University, Durham, N. C.

Note.—The instructional staff of the Junaluska School of Religion is as follows:

PAUL NEFF GARBER, A.B., A.M., Ph.D.; Professor of Church History and Director of Junaluska School of Religion, Duke University.

ELMER TALMAGE CLARK, A.B., M.A., B.D., S.T.D., LL.D.; Assistant Secretary, Board of Missions of the Methodist Church.

ALBERT COOK OUTLER, A.B., B.D., Ph.D.; Assistant Professor of Historical Theology, Duke University.

ELBERT RUSSELL, A.B., A.M., Ph.D., Litt.D.; Professor of Biblical Interpretation and Dean of School of Religion, Duke University.

JAMES VOORHEES THOMPSON, A.B., B.D., Ph.D.; Professor of Religious Education, Drew Theological Seminary.

SOCIOLOGY

Attention is called to the fact that course S101 is a prerequisite to all other courses in the Department.

S101. General Sociology.—An introduction to the scientific study of social life; its origin, evolution, and organization, as illustrated by the study of a number of concrete social problems. This course is prerequisite to all other courses in Sociology. *Section 1 (w), Section 2 (E), B, I; B, II. 3 s.h.*

MR. ELLWOOD (*Section 1*), MR. PRICE (*Section 2*), (*first term*)
MR. YODER (*second term*)

S112. Introduction to Child Welfare.—A special course in child welfare for undergraduates. (Not offered unless as many as twelve students register. If this course is offered, Mr. Price's section of S101 will be withdrawn.) *A, I. 3 s.h.*

MR. PRICE

S205. Social Pathology.—A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society: poverty, physical defectiveness, malnutrition, mental deficiency, mental disease, undirected leisure activities, and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. *B, II. 3 s.h.*

MR. PRICE

S206. Criminology.—A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influences in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. *C, II. 3 s.h.*

MR. PRICE

S212. Child Welfare.—A study of heredity and environment as factors in personality development; infant conservation; welfare responsibilities of the school, emphasizing the physical and mental well-being of the child, play, and compulsory and industrial education; child labor, diagnosis and treatment of delinquency; care of the dependent and neglected child; child-caring agencies, public and private; and a community program of child welfare. *D, I. 3 s.h.*

MR. PRICE

S219. Urban Sociology.—This course studies the function of the city in the larger community which it nucleates both as market and as industrial center. More detailed attention, however, is given to the inner life and problems of the city. *A, I. 3 s.h.*

MR. THOMPSON

S220. Rural Sociology.—A study of the societies developed by people who settle the land and exploit it for a livelihood. The institutions peculiarly rural are the farm family, the peasant village, the ranch, and the plantation. In this course, special attention is given to the plantation and the rural problems of the South. *A, II. 3 s.h.*

MR. YODER

S319. Principles of Sociology.—A critical study of sociological theory. The sociological theories of recent writers will be critically examined with a view to laying the foundation for a constructive theory of the social life in modern biology and psychology. Discussions and papers by the class. *C, I. 3 s.h.*

MR. ELLWOOD

S340. The Sociology of the South.—Special problems in race relations, urban and rural life, etc. *B, I. 3 s.h.*

MR. THOMPSON

SPANISH

S1. Elementary Spanish.—Pronunciation; essentials of grammar to include the regular conjugations and more common irregular verbs; early reading of simple prose; dictation. *A, C, I (first three weeks). 3 s.h.*

MR. DAVIS

S2. Elementary Spanish.—Continuation of course S1; completion of regular and irregular verbs, the subjunctive mood; dictation; composition; reading of cultural material and stories of easy grade. *A, C, I* (second three weeks). 3 s.h. MR. DAVIS

S3. Intermediate Spanish.—Systematic grammar review; dictation; drill on verbs forms; study of high frequency idioms; reading of novels and plays of medium difficulty. *A, II.* 3 s.h. MR. QUINN

S4. Intermediate Spanish.—Rapid reading and study of modern novels and plays for content, with minimum of translation. One standard work will be read in foreign edition. *C, II.* 3 s.h. MR. QUINN

S65. Introduction to Modern Spanish Literature.—Study of representative masterpieces of nineteenth-century novel and drama, with collateral reading and written report on literary topics. *A, I.* 3 s.h. MR. REID

S66. Introduction to Spanish Literature of the Golden Age.—Study of representative works in the field of Golden Age novel and drama; rapid survey of literary types and trends; collateral readings and critical reports. This course will include an introductory study of *Don Quijote*. *C, I.* 3 s.h. MR. LUNDEBERG

S255. The Contemporary Novel and Essay in Spanish America.—Reading and discussion of representative works, with particular emphasis on the growth of *americanismo* and the relation of literature to social history. Individual reports on special topics. *B, I.* 3 s.h. MR. REID

S373. Seminar in Modern Spanish Novel.—The realists and naturalists, with special emphasis on the regionalistic element in their works. This course is a sequence to Spanish S372, but may be taken without course S372. *A, I.* 3 s.h. MR. LUNDEBERG

ZOOLOGY

For admission to candidacy for a Master's degree in Zoology, students should have completed an undergraduate major in Zoology (General Science, Bacteriology, and Botany courses cannot be counted as a part of a Zoology major). This normally amounts to about twenty-four semester hours which should be distributed among the various fields of Zoology, and must include Vertebrate Zoology or Comparative Anatomy, Physiology, and Embryology, passed with creditable grades. A candidate should also have completed at least one year of chemistry. Work for the degree will require eighteen hours in advanced courses in Zoology, and six hours in another department for a minor, in addition to a thesis. Before registering for a degree, students should confer with Dr. George T. Hargitt, Director of Graduate Studies for the Department. Students not candidates for a degree may take courses offered, if they have necessary prerequisites; but may not count them toward a degree until an undergraduate major has been completed.

S100. Comparative Anatomy and Embryology of Vertebrates.—The first three weeks will be devoted to a study of the anatomy and evolution of the organ systems of vertebrates, and the second three weeks to a study of the fundamental principles of embryology as illustrated in frog, chick, and mammal. *Lecture and quiz daily, B; laboratory, 2:00-5:00 daily, I.* 6 s.h. (E) (Laboratory fee, \$6.00.) MISS CULBRETH AND MISS JEFFERS

S225. Field Zoology.—Lectures, readings, reports, laboratory and field work dealing with classification, life histories, and habits of animals. Some time will be spent in the mountains and at the seashore. Students should bring clothing suitable for field trips. Prerequisite: at least one year of zoology. *Schedule to be arranged, II.* 6 s.h. (Laboratory fee, \$6.00.) MR. GRAY

S229. Endocrinology.—The structure, physiology, and embryology of the endocrine glands. Lectures, reading assignments, reports, and laboratory. *B*, 2:00-5:00 P.M., *I*. 6 s.h. (Laboratory fee, \$5.00.) MR. CUNNINGHAM

S219 or S353. Special Problems, Research.—Students with sufficient preparation may carry on investigations under direction, for a thesis or otherwise, in the following fields:

- (a) Embryology and Endocrinology. *I, II*. MR. CUNNINGHAM
- (b) Comparative and General Physiology. *II*. MR. F. G. HALL
- (c) Cytology. *I, II*. MISS JEFFERS AND MR. JOHNSON
- (e) Ecology, Parasitology, Behavior. *I, II*. MR. PEARSE
- (f) Vertebrate Zoology or Entomology. *I, II*. MR. GRAY

(Hours and credit to be arranged. Not more than one semester hour of credit per week full-time schedule, or one semester hour each two weeks for half-time schedule. Laboratory fee, \$3.00 for each three hours of credit; minimum fee, \$2.00.)

The following courses will be given at the Beaufort Marine Laboratory:

S219 or S353. Special Problems, Research.—*I, II*.*

MR. F. G. HALL AND MR. BOOKHOUT

S251. Physiology of Marine Animals.—A study of life processes in marine animals which will include experimental projects that relate to marine environments. *I*. 6 s.h. (Students may enter as late as June 26 for 4 s.h. credit only.) MR. F. G. HALL

S274. Marine Zoology, with Special Reference to Invertebrates.—Field trips, ecology, classification, structure, embryology, and behavior. *II*. 6 s.h. MR. BOOKHOUT

S355. Biological Seminar.—*I, II*. 1 s.h. each term.

MR. BLUMQUIST, MR. BOOKHOUT, AND MR. F. G. HALL

For particulars as to expense, etc., write the Director of the Summer School or Dr. F. G. Hall, Zoology Department, Duke University.

* First term: June 11 to July 20; second term: July 22 to August 31.

SUMMER SCHOOL ANNOUNCEMENT

Specimen Application Blank

DIRECTOR OF SUMMER SCHOOL, DUKE STATION
DURHAM, NORTH CAROLINA

Date.....

Dear Sir:

Please make temporary reservation for me in the following courses described in your Summer School Announcement.

.....
.....
(Signed, full name)
Mr., Mrs., Miss.....

Street

Post Office Address.....

Be careful to give the following information:

Are you a teacher in the public schools?..... Total number years
teaching experience..... Name and address of the school in which
now teaching.....

What teacher's certificate do you hold?.....

State?..... Serial number?..... Year of expiration.....

Name of high school from which you were graduated.....

..... Year of leaving high school?.....

Number of years completed in college.....Are you a graduate?.....

If at present a college student, where?.....

What class?..... How many years of graduate work, if any, have
you completed?..... In what department(s)?.....

..... If you have not completed a year of graduate
work, how many summer schools, if any?..... In what department(s)?.....

Do you wish room reserved?..... Alone?.....

First term?..... Second?..... Name and address of
roommate preferred.....

.....
In graduate dormitory?..... Undergraduate?.....

N.B. Graduate dormitories are not open to undergraduates under thirty years of age. Room reservations of graduate students are tentative until the student has been accepted by the Graduate School. Students who wish a room reserved for the first term will remit full amount of room-rent; other students simply indicate whether they desire room in graduate or undergraduate dormitory. The Summer School reserves the right to cancel room reservation or registration for courses without assignment of reason.

Note: Students who do not wish to submit transcripts of their previous college record, because desiring to transfer their summer school credits to some other institution, should answer the following:

Do you wish blank for statement from your college certifying your present class standing and requesting transfer of your summer school record?.....

INDEX

- Accounting, courses in, 34
- Administrative Courses, 36
- Administrative Officers, 3
- Admission, 14
- Affiliated Summer School, 28, 57
- American Literature, courses in, 46
- Application blank, specimen, 61
- Appointments Bureau, 27
- Availability of rooms, 14
- Beaufort, Marine courses at, 32, 60
- Biology, courses in, 31, 59
- Board and rooms, 24
- Botany, courses in, 31
- Calendar, 13
 - changes for summer of 1940, 13
- Campus and buildings, 12
- Carillon, 27
- Certification of teachers, 15, 30
- Chemistry, courses in, 33
- Coaching School, 28
- Conferences on Guidance, 28
- Conference on Status of Teaching, 27
- Conservation, courses on, 34
- Courses of Instruction, 31
- Credits, 15
- Curriculum Reconstruction, courses in, 30
- Dormitories, 24
 - for married students, 25
- Drawing, course in, 44
- Duke University, 12
- Economics, courses in, 34
- Education, courses in, 35
 - Undergraduate, courses in, 42
- Educational Psychology, courses in, 38
- Elementary Education, courses in, 41
- Engineering, courses in, 43
- English, courses in, 45
- Enrollment, 12
- Entertainment, 27
- Examinations, 15
 - for M.Ed. degree, 16
- Expenses, 25
- Explanations and Abbreviations, 31
- Faculty, 3
- Fees, 25
- Forestry, 48
- French, courses in, 48
- Geography, courses in, 34, 43, 49
- Geology, course in, 49
- German, courses in, 50
- Government, courses in, 50, 55
- Graduate Instruction, 19, 29
 - advanced degree, 19
 - degree of Doctor of Philosophy, 19, 23
 - major and minor subjects, 20
 - minimum residence requirements, 20
 - suggested program for Master's degree, 21
 - thesis writing in Summer School, 21, 23
 - transfer of credits from elsewhere, 21
- Grammar Grade Teachers' Courses, 41, 42
- Greek Literature, courses in, 50
- Growth of Summer School, 12
- Guidance, Conferences for Workers in, 28
 - courses in, 37
- Health Education, courses in, 44
- High-School Teachers' Courses, 40
- History, courses in, 50
- Hygiene, course in, 44
- Industrial Art, course in, 44
- Junaluska School of Religion, 28, 57
- Libraries, 12
- Marine Biology, courses in, 32, 60
- Master's degrees, New Requirements for, 16, 19, 22
- Master of Arts degree, 20
- Master of Education degree, 22
 - examinations for, 16
 - special courses for, 18, 22
- Mathematics, courses in, 53
- Music, course in, 54
- Numbering of Courses, 15
- Orphanage Workers, School for, 28
- Physical Education, 44
- Physics, courses in, 55
- Political Science, courses in, 55
- Primary Teachers' Courses, 41, 42
- Psychology, courses in, 56
- Public School Administration, courses in, 36
- Public School Supervision, 37
- Recreation and Entertainment, 27
- Registration, 13
- Religion, courses in, 56
- Religious Services, 27
- Reservation of Rooms and Courses, 26
- Residence Requirements for degrees, 16, 20
- Rooms and Board, 24
- Schedule of courses: *see* Explanations and Abbreviations, 31
- School for Workers in Children's Homes and Orphanages, 28
- Secondary Education Courses, 40
- Sociology, courses in, 57
- Spanish, courses in, 58
- Statistics as to enrollment, 12
- Summer Quarter, 13
- Supervision Courses, 37
- Surveying, courses in, 43
- Swimming, 44
- Thesis Courses, 31
- Thesis for Master's degree, 21, 23
- Thesis Writing, 23
- Tri-State Conference of Orphanage Workers, 28
- Zoology, courses in, 59

VOLUME 12

March, 1940

NUMBER 5-A

BULLETIN OF DUKE UNIVERSITY

The School of Law



ANNOUNCEMENT FOR 1940-1941

PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

ANNUAL BULLETINS

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF RELIGION, apply to *The Registrar of the School of Religion*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SCHOOL, apply to *The Director of the Summer School*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN
OF
DUKE UNIVERSITY
THE SCHOOL OF LAW



ANNOUNCEMENT FOR 1940-1941

DURHAM, NORTH CAROLINA

1940

CONTENTS

I. FACULTY

	PAGE
Faculty	7

II. ORGANIZATION, EQUIPMENT, AND SPECIAL ACTIVITIES

History and Organization.....	10
Purposes and Methods of Instruction.....	11
The Law School Building.....	11
The Law Library.....	12
The Legal Aid Clinic.....	12
The Practice Course.....	13
Legal Periodicals.....	13
The Duke Bar Association.....	14

III. GENERAL INFORMATION

Matriculation, Registration, and Enrollment.....	15
Fees and Expenses.....	15
Scholarships and Student Aids.....	16
Awards	17
Order of the Coif.....	17
Conduct of Students.....	18
Recreational Facilities.....	18

IV. ADMISSION OF STUDENTS

Directions to Applicants for Admission.....	19
Requirements for Admission.....	19
Combined Course.....	19
Admission to Advanced Standing.....	20
Candidates for Graduate Degrees.....	20

V. REQUIREMENTS FOR BACHELOR OF LAWS DEGREE— STUDENT PROGRAMS

Bachelor of Laws Degree.....	21
The First-Year Program.....	21
Second- and Third-Year Programs.....	22

VI. GRADUATE WORK IN LAW

Graduate Degrees.....	24
Requirements for Admission to Graduate Study.....	24
Degree of Master of Laws.....	24
Degree of Doctor of Juridical Science.....	25

VII. COURSES OFFERED

General Courses.....	26
Business Courses.....	26
Property Courses.....	28
Public Law Courses.....	29
Jurisprudence Courses.....	30
Procedure and Practice Courses.....	30
Legal Research and Writing.....	32

VIII. STUDENTS

Enrollment for 1939-40.....	33
First-Year Class.....	33
Second-Year Class.....	34
Third-Year Class.....	36
Graduate Students.....	37
Institutions Represented.....	37
States and Foreign Countries Represented.....	38
General Summary.....	38
Degrees Awarded in June, 1939.....	38

UNIVERSITY CALENDAR

1940

- Sept. 18. Wednesday—Registration of Law Students.
Sept. 19. Thursday—Commencement of Instruction.
Nov. 28. Thursday—Thanksgiving Day: a holiday.
Dec. 11. Wednesday—Duke University Day.
Dec. 20. Friday—1:00 P.M. Christmas recess begins.

1941

- Jan. 3. Friday—8:10 A.M. Instruction is resumed.
Jan. 17. Friday—Mid-year examinations begin.
Jan. 31. Friday—Last day for matriculation for second semester.
Feb. 1. Saturday—Second semester begins.
March 22. Saturday—1:00 P.M. Spring vacation begins.
March 31. Monday—8:10 A.M. Instruction is resumed.
May 16. Friday—Final examinations begin.
May 31. Saturday—Commencement opens; Faculty Breakfast for Law Seniors.
June 1. Sunday—President's Address to Graduating Class.
June 2. Monday—Commencement Address; Graduating Exercises.

I. FACULTY

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., Litt.D., LL.D.

PRESIDENT OF THE UNIVERSITY

H. CLAUDE HORACK, Ph.B., LL.B., LL.D.

DEAN AND PROFESSOR OF LAW

Ph.B. 1899, LL.B. 1900, State University of Iowa; LL.B. 1904, Harvard University; LL.D. 1937, Tulane University; LL.D. 1939, Wake Forest College; Assistant Professor of Law, University of Wisconsin, 1904-07; Professor of Law, State University of Iowa, 1907-30; University of Michigan, summer 1922; University of Wisconsin, summer 1924; University of Southern California, summer 1931; Stanford University, summer 1936; Adviser, Council of Legal Education and Admissions to the Bar of the American Bar Association, 1927-30; Secretary, Association of American Law Schools, 1926-28, President, 1929; Professor of Law, Duke University, 1930-34; Dean and Professor of Law, since 1934.

BRYAN BOLICH, A.B., B.A. (Juris.), M.A., B.C.L.

PROFESSOR OF LAW

A.B. 1917, Duke University; Duke University Law School, 1919-21; B.A. (Juris.) 1923, B.C.L. 1924, M.A. 1927, Oxford University; general practice, 1924-27; Professor of Law, Duke University, since 1927.

JOHN S. BRADWAY, A.B., A.M., LL.B.

PROFESSOR OF LAW AND DIRECTOR OF THE LEGAL AID CLINIC

A.B. 1911, A.M. 1915, Haverford College; LL.B. 1914, University of Pennsylvania; general practice, 1914-29; Legal Aid Society of Philadelphia, 1914-20; chief counsel, Philadelphia Legal Aid Bureau, 1920-22; Secretary, National Association of Legal Aid Organizations since 1923; Visiting Professor of Law and Director of the Legal Aid Clinic, University of Southern California, summer 1928; Professor of Law and Director of the Legal Aid Clinic, University of Southern California, 1929-31; Professor of Law and Director of Legal Aid Clinic, Duke University, since 1931.

THADDEUS DILLIARD BRYSON, LL.D.

PROFESSOR OF LAW

Emory and Henry College, 1889-90; University of North Carolina, 1891-95; LL.D. 1938, Emory and Henry College; general practice, 1895-1918; Solicitor, 20th Judicial District, North Carolina, 1908-16; Judge, Superior Court, North Carolina, 1918-26; general practice, 1926-27; Professor of Law, Duke University, since 1927.

DAVID F. CAVERS, B.S., LL.B.

PROFESSOR OF LAW

B.S. in Econ. 1923, University of Pennsylvania; LL.B. 1926, Harvard University; general practice, 1926-29; Instructor in Law, Harvard University, 1929-30; Assistant Professor of Law, West Virginia University, 1930-31; Visiting Professor of Law, Yale University, first semester, 1936-37; Assistant Professor of Law, Duke University, 1931-32; Professor of Law, Duke University, since 1932.

ELVIN R. LATTY, B.S., J.D., J.Sc.D.

PROFESSOR OF LAW

B.S. 1923, Bowdoin College; J.D. 1930, University of Michigan; J.Sc.D. 1936, Columbia University; Instructor in Romance Languages, University of Vermont, 1923-27; general practice, 1930-33; Special Fellow, Columbia University, 1933-34; Associate Professor of Law, University of Kansas, 1934-35; Professor of Law, University of Missouri, 1935-37; George Washington University, summer 1937; Stanford University, summer 1938; Professor of Law, Duke University, since 1937.

CHARLES LUCIEN BAKER LOWNDES, A.B., LL.B., S.J.D.

PROFESSOR OF LAW

A.B. 1923, Georgetown University; LL.B. 1926, S.J.D. 1931, Harvard University; general practice, 1926-27; Assistant Professor of Law, Georgetown University, 1927-28; Professor of Law, Georgetown University, 1928-30; research fellow, Harvard Law School, 1930-31; Professor of Law, Georgetown University, 1931-34; Professor of Law, Duke University, since 1934.

MALCOLM McDERMOTT, A.B., LL.B.

PROFESSOR OF LAW

A.B. 1910, Princeton University; LL.B. 1913, Harvard University; general practice, 1913-30; Dean, College of Law, University of Tennessee, 1920-30; University of Southern California, summer 1929; Professor of Law, Duke University, since 1930.

DOUGLAS BLOUNT MAGGS, A.B., J.D., S.J.D.

PROFESSOR OF LAW

A.B. 1922, J.D. 1924, University of California; S.J.D. 1926, Harvard University; general practice, 1924-25; Assistant Professor of Law, University of California, 1926-27; Professor of Law, University of Southern California, 1927-30; Visiting Professor of Law, Columbia University, 1928-29; Yale University, second semester, 1935-36; University of California, summer 1927; Cornell University, summer 1928; University of Chicago, summer 1929; Stanford University, summer 1935; University of North Carolina, summer 1936; Special Assistant to the Attorney General of the United States, 1938-39; Professor of Law, Duke University, since 1930.

J. DOUGLASS POTEAT, A.B., LL.B., J.S.D.

PROFESSOR OF LAW

A.B. 1923, LL.B. 1926, Furman University; J.S.D. 1933, Yale University; general practice, 1926-30, 1933-36; Associate Professor of Law, Furman University, 1929-30; Professor of Law, Furman University, 1930-33; Professor of Law, Duke University, since 1936.

WILLIAM R. ROALFE, LL.B.

LAW LIBRARIAN

LL.B. 1922, University of Southern California; general practice, 1923-25; Law Librarian, University of Southern California, 1927-30; President, American Association of Law Libraries, 1935-36; Law Librarian, Duke University, since 1930.

PAUL H. SANDERS, A.B., LL.B.

ASSISTANT PROFESSOR OF LAW

A.B. 1931, Austin College; LL.B. 1934, Duke University; general practice, 1934; Assistant to Director of National Bar Program, American Bar Association, 1934-36; Assistant Professor of Law, Duke University, since 1936.

HAROLD SHEPHERD, A.B., J.D.

PROFESSOR OF LAW

A.B. 1919, J.D. 1922, Stanford University; Dean and Professor of Law, University of Wyoming, 1922-23; Associate Professor of Law, Stanford University, 1923-26; Professor of Law, Stanford University, 1926-30; Visiting Professor of Law, University of Chicago, 1929-30; Professor of Law, University of Chicago, 1930-31; Columbia University, summer 1929; University of Minnesota, summer 1930; Stanford University, summer 1932; Dean and Professor of Law, University of Washington, 1931-36; Professor of Law, University of Cincinnati, since 1936; Secretary, Association of American Law Schools, 1938-40, President-elect, 1940; Professor of Law, Duke University, since 1939.

EDWIN CONSTANT BRYSON, LL.B.

ASSISTANT IN LEGAL AID CLINIC

University of North Carolina, 1922-26; LL.B. 1937, University of Oregon; general practice, 1927-30; Legal Aid Clinic Staff, Duke University, since 1931.

MARY SIMMONS COVINGTON, A.B., LL.B.

RESEARCH LIBRARIAN, SCHOOL OF LAW

A.B. 1905, Shorter College; LL.B. 1922, George Washington University; general practice, 1924-30; Research Librarian, School of Law, Duke University, since 1930.

CHARLES HENDERSON MILLER, A.B., LL.B.

ASSISTANT IN LEGAL AID CLINIC

A.B. 1928, LL.B. 1934, Duke University; Legal Aid Clinic Staff, Duke University, since 1931.

HELEN MILDRED KENDALL, A.B.

REGISTRAR

A.B. 1925, DePauw University; graduate work, University of Wisconsin, 1934; Registrar, School of Law, Duke University, since 1935.

FACULTY COMMITTEES

Committee on Curriculum: H. C. Horack, Chairman, John S. Bradway, Elvin R. Latty, Douglas B. Maggs, Malcolm McDermott, Harold Shepherd.

Committee on Graduate Study: David F. Cavers, Chairman, Bryan Bolich, H. C. Horack, Charles L. B. Lowndes.

Committee on Rules: Charles L. B. Lowndes, Chairman, David F. Cavers, J. Douglass Poteat, Paul H. Sanders.

Committee on Scholarship: Malcolm McDermott, Chairman, Paul H. Sanders, J. Douglass Poteat.

Committee on Emergency Aids and Loans to Law Students: John S. Bradway, Chairman, T. D. Bryson, Mary S. Covington, Elvin R. Latty.

LAW SCHOOL COMMITTEE OF THE BOARD OF TRUSTEES

Willis Smith, Raleigh, North Carolina.

James A. Bell, Charlotte, North Carolina.

W. R. Perkins, New York City.

B. S. Womble, Winston-Salem, North Carolina.

II. ORGANIZATION, EQUIPMENT, AND SPECIAL ACTIVITIES

HISTORY AND ORGANIZATION

Legal instruction in Trinity College dates from 1850, but it was not until 1868 that professional training in law was offered. The two chairs in the Department of Law were those of National and Constitutional Law, and Common and Statute Law. President Braxton Craven occupied the former from 1868 until his death in 1882. Outstanding members of the bench and bar were specially engaged, in given years, to lecture on particular subjects. Complete instruction was given "by daily lectures and regular examinations," and students were "fully prepared to obtain license."

In 1882 the Department of Law was discontinued. In 1891 instruction in law was resumed, with the appointment of the Honorable A. C. Avery, Associate Justice of the Supreme Court of North Carolina, as dean of the Law School, and continued until 1894.

The School of Law of Trinity College was founded in the summer of 1904 upon an endowment established by James B. Duke and Benjamin N. Duke. Samuel Fox Mordecai organized the School and was its dean until his death in 1927. Its establishment set a new standard in Southern legal education in that it was the first school to require college work as preliminary to law study. It required the completion of two years of college work as prerequisite to entrance, the case method was used as the basis of instruction, and the completion of three years of resident study was required for a law degree.

In 1924 the School of Law of Trinity College became the Duke University School of Law pursuant to the establishment of the Duke Endowment. In 1930 the School was moved into its new building, the Faculty and Library were greatly increased, and the activities of the School broadened. In 1931 the entrance requirement was raised from two to the present requirement of three years of college work. The School of Law is a member of the Association of American Law Schools and is on the "Approved List" of the American Bar Association.

The ideas of the founder with reference to the University and its training of lawyers are thus expressed in the indenture and deed of trust establishing the Duke Endowment:

I have selected Duke University as one of the principal objects of this trust, because I recognize that education, when conducted along sane and practical, as opposed to dogmatic and theoretical lines, is, next to religion, the greatest civilizing influence. I request that this institution secure for its officers, trustees and faculty, men of such outstanding character, ability and vision as will assure its attaining and maintaining a place of real leadership in the educational world, and that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for

life. And I advise that the courses at this institution be arranged, first, with special reference to the training of preachers, lawyers and physicians, because these are most in the public eye, and by precept and example can do most to uplift mankind.

PURPOSES AND METHODS OF INSTRUCTION

The School of Law offers such courses in its curriculum as will provide an adequate preparation for the practice of law in any state. Through facilities for study and research, training is afforded for those desiring to specialize in particular branches of the law.

It is conceived that the trust imposed by the Duke indenture cannot be discharged by the mere instruction of the student in the rules and principles of law which have received acceptance in a single state or in common law jurisdictions generally. The method of legal education employed in the School of Law, by compelling analysis of judicial opinions and inquiry into the various legal and nonlegal considerations underlying them, acquaints the student not only with legal doctrine, but also with the judicial process and the role of the courts as creative agencies in social development.

The curriculum has been arranged with a view to insuring not only a balanced selection of courses in the first two years of study, but also an opportunity for some degree of specialization in the third year so that by intensive work in a single field the student may acquire a degree of mastery of its problems. The increasing interrelation of the economic and political problems in the life of the nation and the consequent responsibility of the lawyer in effecting the necessary adjustments are recognized in an ample offering of courses in which special consideration is given to the work of the legislative and administrative agencies of government.

To provide scope for creative work by the student, seminar courses and the courses in Current Decisions are offered. To achieve balance between intellectual discipline and that practical training which the young lawyer is otherwise left to obtain at the expense of his clients, instruction is offered in Research and Briefing and Practice Court, and the third-year class participates in the work of the Legal Aid Clinic.

Through the organization of the student body in a Bar Association, a medium is afforded for extracurricular activity designed to awaken in the student a sense of his responsibilities as a member of his profession and to familiarize him with a type of organization through which some contribution to the well-being of his profession and society may be made.

The courses of study offered in the School of Law are described at pages 26 to 32 of this bulletin.

THE LAW SCHOOL BUILDING

The Law Building, like all other structures on the main campus of Duke University, is in Tudor Gothic style of colorful Cambrian stone from the Duke University quarries. It was occupied by the School of Law for the first time in September, 1930. In it are classrooms, seminar rooms, offices for Faculty and Staff, quarters for the Legal Aid Clinic and

for the Duke Bar Association, a courtroom equipped for trial court and appellate court sessions, and the Law Library.

THE LAW LIBRARY

The Law Library contains a collection of more than sixty thousand volumes, which is the largest law school collection in the South. It consists of American and English statutory and case law; a collection of Continental Law materials; treatises, digests, encyclopedias; the various selected case series; a comprehensive collection of legal periodicals; and publications in the fields of history, economics, government, and the other social sciences, supplemental to the strictly legal materials. The Library receives every current legal periodical of general interest printed in the English language.

There are several thousand additional volumes of a legal nature in the main library building, immediately adjoining the Law School, as well as the general collection of nearly a half million volumes, to all of which the law students and Faculty have convenient access.

The Law Library is administered by a professionally trained staff and is open to the public daily throughout the year and in the evenings as well whenever the Law School is in session.

THE LEGAL AID CLINIC

A Legal Aid Clinic was organized at the School of Law in 1931 under the direction of Professor John S. Bradway, Secretary of the National Association of Legal Aid Organizations, who had directed similar undertakings in Philadelphia and Los Angeles. The purpose of the Clinic is threefold: to give the student experience in handling actual cases; to develop creative skills, techniques, and mental habits; to encourage a sense of responsibility to client, court, profession, and community. The student is obliged to synthesize his knowledge in applying it to concrete situations which may often cut across course boundaries. He is trained in the technique of fact-gathering, the strategy of a lawsuit, the handling of clients, and the management of a law office. Classroom work is given, supplementing the handling of actual cases. The practice in the Clinic is of a sort calculated to stress the ethical responsibilities of the lawyer and the social implications of his work. The latter aspect of this work is developed further by contacts with various agencies of social welfare in North Carolina.

Time is devoted to preparation of memoranda of law, opinions, trial and appellate briefs. Material for this work is secured from lawyers in active practice.

The Legal Aid Clinic is in effect a large, well-rounded law office offering the student experience in interviewing clients, investigation of facts, preparing cases for adjustment or for trial in court, briefing, and other tasks familiar to the practicing attorney. Approximately three hundred persons a year apply for the services of the Clinic. Only those applicants who are unable to pay counsel fees and only those cases where there is no opportunity for a contingent fee are accepted.

The activities of the Clinic are centered in a suite of offices in the Law School Building. In addition to the Director, a staff of four members of the North Carolina State Bar assist in the educational activities of the Clinic and in representing its clients in court proceedings. The course is required of members of the third-year class who have not been selected to take the course in Current Decisions II.

THE PRACTICE COURSE

The practice course in the School of Law is under the direction of Judge T. D. Bryson, for eight years judge of the Superior Court of the Twentieth Judicial District of North Carolina. The object of the course is to offer third-year students an opportunity to visualize by actual experience the application of the principles of law imparted in other courses.

The course features trial court practice in both civil and criminal actions, appellate practice, the drawing of contracts and wills, making abstracts of title, and drafting of other legal papers incident to the work of the active legal practitioner. In order that the work may correspond to the work of a trial court, a courtroom with the usual appointments has been provided.

LEGAL PERIODICALS

The School of Law publishes a quarterly, *Law and Contemporary Problems*, under the editorship of Professor Cavers. This periodical, now in its seventh volume, presents in each issue a symposium on a problem of current legal importance, in which the interrelated social and economic, as well as legal, factors are discussed by writers of competence in these respective fields. Where student research may contribute to the understanding of the legal aspects of such problems, student writings are accepted for publication. Included among the topics discussed in the first six volumes of *Law and Contemporary Problems* are food and drug control, low-cost housing, federal criminal laws, industrial and group-life insurance, instalment selling, migratory divorce, alimony, expert testimony, social security legislation, the compensation of the motor accident victim, the Securities Act of 1933, price discrimination and price cutting, collective bargaining under the Wagner Act, and the wage and hour law.

The circulation of *Law and Contemporary Problems* extends not only to members of the legal profession and law libraries throughout the country, but also to industrial and financial concerns, governmental agencies, and public and general university libraries. Individual issues are not infrequently used as materials for study in university courses.

The Duke Bar Association has published since 1933 the *Duke Bar Association Journal* in which appear reports of addresses made before the Association by distinguished guests, proceedings of the Association at its regular meetings, and items of interest concerning the School. To afford a medium for the publication of the student notes and comments on recent important decisions prepared in the Current Decisions course without necessitating the inclusion in the quarterly of the department of

student work usual in "law reviews," the *Journal* publishes such notes and comments as are deemed by the editors to be of special merit. Professor Cavers serves as adviser to the student editorial board of the *Journal*.

THE DUKE BAR ASSOCIATION

The Duke Bar Association was established in the spring of 1931. It is composed of all the students of the Law School and is organized along the lines of the American Bar Association. Its purpose is to introduce the student to the problems considered by the bar in professional organizations and to develop professional consciousness and responsibility. It publishes the *Duke Bar Association Journal*, described in the preceding section. Its activities are carried on by the students with the co-operation of Dean Horack of the Law Faculty as general adviser.

III. GENERAL INFORMATION

MATRICULATION, REGISTRATION, AND ENROLLMENT

On the day of registration, September 18, 1940, the applicant must obtain from the Dean of the Law School an admission card, indicating that he is entitled to register. Registration is conducted in the Law Building. All students, both old and new, are required to register at the beginning of each semester, at which time class schedule and course cards must be filled out and approved. Students matriculating in either semester at a date later than that prescribed in this catalogue shall pay to the Treasurer a penalty of \$5.00 for late registration. Instruction will begin in all classes on Thursday, September 19, 1940.

All students are admitted subject to the rules of the University and of the School of Law, and continuance in the School is conditioned upon the observance of such rules.

(Many states now require that the student, prior to or shortly after beginning the study of law, must register with the board of bar examiners of the state in which he expects to practice. Each student should write to the secretary of the board of bar examiners of such state in order to be sure that all requirements are fulfilled.)

FEES AND EXPENSES

Tuition and registration fees are due at the beginning of each semester. The matriculation fee is \$25.00 a semester. The tuition fee is \$100.00 a semester. A damage fee of \$1.00 is collected at the beginning of the first semester only, an athletic fee of \$5.00 at the beginning of each semester, a library fee of \$5.00 each semester, and a medical fee of \$5.00 each semester. The graduation fee, payable by all students to whom a degree is awarded, is \$10.00.

Payment of the athletic fee entitles the student to admittance to all athletic events on the campus.

The payment of the medical fee entitles the student to full medical and surgical care, with the exceptions noted below. This service is under the direction of the University Physician with the co-operation of the Staff of Duke Hospital. It includes hospitalization, medical and surgical care, drugs, dressings, X-ray studies, and ward nursing. A charge for board is made at the same rate as in the University dining halls, and student meal tickets for these halls are accepted in payment of this board. Refraction of eyes, treatment of teeth and of all chronic conditions, such as the removal of diseased tonsils, are not included in this service. The cost of any necessary braces and orthopedic appliances as well as of special nursing must be borne by the student.

Furnished double rooms may be secured in the graduate dormitory on the West Campus at \$62.50 per person per semester. A few single

rooms are available at \$75.00 per semester. There are a very limited number of double rooms on the East Campus (about a mile and a half from the Law Building) at \$30.00 to \$50.00 per person per semester.

A group of log cabins especially designed as a study center for law students is located in the Duke Forest about five minutes' walk from the Law Building. These cabins, five in number, including a large cabin for use as a social hall, house thirty-two students, about one third of the space being allotted to each of the three law classes. Furnished double rooms in the log cabins may be secured at \$40.00 per person per semester.

These charges in each case include heat, light, water, and janitorial service but do not include pillows or bed clothing of any kind.

Law students are advised to make early application as assignment of rooms is made soon after the middle of May. The applicant should state that he has been accepted for admission to the School of Law. All dormitory rooms are to be occupied under the rules and regulations established by the University. Law students are not required to live in the University dormitories.

The *General Bulletin* of the University contains the following statements concerning the reservation of dormitory rooms:

Rooms are reserved only for applicants who have been officially accepted by the University, upon application to the Director in the Business Division, Duke Station, Durham, North Carolina. A reservation fee of \$25.00 must accompany the application for a room. The reservation fee is deducted from the room charges at the time of registration for the fall semester. An applicant who is accepted and has a room reserved is not entitled to a refund of the reservation fee unless the request is made on or before August 1.

A resident student in order to retain his room for the succeeding year is requested to make application accompanied by a reservation fee of \$25.00 between April 15 and May 15 at the office of the Director in the Business Division. All rooms which have not been reserved on or before May 15 will be considered vacant for the succeeding year and will be reserved in the order in which applications are made.

Rooms are rented for no shorter period than one semester, unless by special arrangement with the Director in the Business Division. A period of occupancy other than a semester or quarter and without special arrangement will be charged at a minimum rate of \$1.00 each day.

The authorities of Duke University do not assume the responsibility of selecting and assigning roommates, though they will gladly render any assistance possible.

Each student is expected to supply necessary sheets, blankets, pillows, rugs, and curtains. Furniture, beds and mattresses (39" x 74"), tables, chairs, dressers, mirrors, and window shades are furnished by the University.

Board may be secured at approximately \$25.00 per month at the University Union.

The cost of law books will average, through the three years, between \$20.00 and \$30.00 per semester.

SCHOLARSHIPS AND STUDENT AIDS

A limited number of scholarships covering tuition and matriculation fees (\$250) are available to first-year students, graduates of approved American universities and colleges, who are in need of such assistance.

Applicants must have made excellent records in their college work and must show unusual promise of success in the study of law.

Applications for scholarships should be presented before May 1 to the Dean of the Law School, together with a transcript of college work and letters of recommendation from responsible persons, certifying to the character and fitness of the applicant.

Other scholarships are awarded, as funds may permit, to students who have spent a year or more at the Law School. There are also a number of positions as assistants in the Law Library and as research assistants which are open to students particularly in their second or third year, who do not receive other aids from the University.

Scholarships are, in addition, granted each year to the three students with the best scholastic records in the first- and second-year classes. Under this plan scholarships were awarded for 1939-40 to the following members of the first-year class of 1938-39: Numa L. Smith, Jr., High Point, N. C.; George T. Frampton, Scarsdale, N. Y.; Benjamin S. Horack, Durham, N. C.; and to the following members of the second-year class in that year: Harrell Pope, Dunn, N. C.; Joseph Laufer, Durham, N. C.; Benjamin D. Raub, Jr., Easton, Pa.

The University administrators certain endowed loan funds for the benefit of students who are not financially able to meet their expenses, for the purpose of aiding worthy students who have established a satisfactory record at the School to continue their education.

Two funds have been provided out of which small loans may be made to tide students over temporary financial emergencies arising during the course of the year. One of these was supplied by the Law School Guild and is limited as to amount and duration of loan. The other is due to the generosity of Mr. P. Frank Hanes of the Winston-Salem bar and is limited to the needs of selected students. These funds are administered by a committee of the Faculty.

AWARDS

Willis Smith Prize. Mr. Willis Smith, a member of the Raleigh bar and Chairman of the Law School Committee of the Board of Trustees of Duke University, awards each year to that member of the graduating class of the Law School who has maintained the highest scholastic average during the entire three years of law school work, a prize consisting of a set of books selected personally by Mr. Smith each year for that purpose. The winner of the prize for 1932 was Jeter S. Ray, Newport, Tenn.; for 1933, William B. McGuire, Jr., Franklin, N. C.; for 1934, Robert Gilpin Seaks, Harrisburg, Pa.; for 1935, Erle Pettus, Jr., Birmingham, Ala.; for 1936, Edward Rubin, Los Angeles, Calif.; for 1937, William R. Perdue, Jr., Macon, Ga.; for 1938, Thomas E. Butterfield, Jr., Bethlehem, Pa.; and for 1939, Gustav B. Margraf, Cape Girardeau, Mo.

ORDER OF THE COIF

A chapter of the Order of the Coif, national legal scholarship society, has been established at Duke University School of Law. Its purpose is

"to foster a spirit of careful study and to mark in a fitting manner those who have attained a high grade of scholarship." Election is restricted to the ten per cent of the Senior Class who have attained the highest rank in their law school work. Those receiving this honor in the graduating class of 1939 were: Robert W. Bogue, Parker, S. D.; Fleming B. Bomar, Spartanburg, S. C.; and Gustav B. Margraf, Cape Girardeau, Mo.

CONDUCT OF STUDENTS

The University expects of its students loyal and hearty co-operation in developing and maintaining high standards of conduct as well as of scholarship. The University, therefore, reserves the right, and matriculation by the student is a concession of this right, to compel the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

RECREATIONAL FACILITIES

The University is located about two miles from the business district of Durham on wooded hills constituting part of the five-thousand-acre Duke Forest, which is maintained by the School of Forestry. Within a short distance from the campus are facilities for golf, horseback riding, and woodland hiking. These activities are available the year round in the mild climate of the Piedmont section of North Carolina. Students of the Law School are entitled to the use of the University gymnasium, tennis courts, swimming pool, and similar privileges without cost. Motion pictures are shown in the Page Auditorium twice a week, and concert programs, recitals, lectures, and plays are presented frequently.

IV. ADMISSION OF STUDENTS

DIRECTIONS TO APPLICANTS FOR ADMISSION

Applications should be made on the prescribed Law School application blanks which will be sent upon request, and no application is complete until all required documents are on file. Each application for regular or advanced standing must be accompanied by a complete transcript of record and evidence of graduation or right to honorable withdrawal from the institution from which credit is offered. To the application blank should be attached a recently made personal photograph. Letters from responsible persons, certifying to the character and ability of the applicant, are required.

It is desired that students may be selected who give promise of leadership in some of the various phases of professional activity. It is recognized that such selection is difficult. However, graduation from Duke University School of Law is intended to constitute evidence of capacity for superior work in some branch of the profession of law. Applicants for admission and their sponsors are requested to keep this fact in mind.

REQUIREMENTS FOR ADMISSION

Any person may be admitted as a candidate for the degree of Bachelor of Laws (1) who is a graduate of a college of approved standing, or (2) who has completed in a college of approved standing work equivalent in number of units to three fourths of that required for graduation and whose college work in its entirety shows an average grade equal to that required for graduation, the requirement in each case being determined by the regulations of the college where the work was taken.

COMBINED COURSE

A number of colleges, upon application by their students, have permitted those who have completed three years of undergraduate work, to enter the Law School of Duke University and upon the satisfactory completion of the first year of law school work to receive their Bachelor of Arts degrees from such colleges. It is suggested that students desiring to enter Duke University School of Law make inquiry of their proper college authorities regarding this point.

A student in either of the Liberal Arts Colleges of Duke University may complete in six years a combined course wherein he will have received his academic degree and also the degree of Bachelor of Laws. This arrangement is made possible under the following recommendations of the Faculty of the arts colleges:

Students who have completed with not less than a "C" average at least ninety-six semester hours of undergraduate work in the pre-legal group of studies in Duke University may on the approval of the Dean of the Undergraduate College transfer to this Law School and become eligible

for the Bachelor's degree on the satisfactory completion of the full twenty-six semester hours of work of the first-year class in this School.

It is understood that this provision shall apply solely to eligible Duke University undergraduates, and that not less than the full first-year's work of the Law School will be acceptable for credit toward the Bachelor's degree.

It should be noted that while the Combined Course plan of securing two degrees is restricted to those who have taken the "pre-legal course," general admission to the Law School is not so restricted.

ADMISSION TO ADVANCED STANDING

Any person, who has complied with the requirements for admission set forth in this announcement, prior to the commencement of his law study, who shall present evidence of the satisfactory completion of any part of the curriculum at any law school which is a member of the Association of American Law Schools, and who is eligible for readmission to the law school from which he proposes to transfer, may be admitted to advanced standing, subject to such rules as would be applicable to students in this School having a comparable scholastic record. Provisional credit for courses so completed shall be given, final credit for such work to be conditioned on the completion of at least one full year of law study in this School with an average of at least five points above the passing grade. Adjustment of credit for work done in such other law schools may be by vote of the Faculty.

CANDIDATES FOR GRADUATE DEGREES

Applications for admission to graduate study should be addressed to the Dean of the Law School and should include transcripts of records of legal and pre-legal work. For the requirements for the graduate degrees see pages 24 and 25.

Further information will be sent upon request. Please address

THE DEAN OF THE SCHOOL OF LAW
DUKE UNIVERSITY
Durham, North Carolina

V. REQUIREMENTS FOR BACHELOR OF LAWS DEGREE—STUDENT PROGRAMS

BACHELOR OF LAWS DEGREE

Upon favorable recommendation of the Faculty, the degree of Bachelor of Laws will be conferred on students who shall have successfully completed three years' study of law, the last full year of work immediately preceding the granting of such degree having been completed, except under extraordinary circumstances, in this School.

A student shall be deemed to have completed successfully three years' study of law if during this period he has

(1) secured a passing grade in courses aggregating the number of semester hours in the first-year program of study plus forty-eight semester hours;

(2) secured in every required course a grade not requiring repetition thereof; and

(3) secured an average grade at least five points above passing in all work taken other than first-year courses, or, if such grade is lower than that above specified, an average grade of five points above passing in all work taken.

Students who shall have spent only their third year of study in residence in this School must have received an average grade at least five points above passing for that year.

THE FIRST-YEAR PROGRAM

All of the first-year courses are required for graduation, and no second- or third-year courses may be elected until the student has secured grades not requiring repetition of any first-year courses or has made provision for the completion thereof.

The following courses comprise the work of the first year:

<i>Subject</i>	<i>Hours per semester</i>	
Chattel Transactions	2	2
Contracts	4	3
Criminal Law and Its Administration	2	2
Torts	2	3
Introduction to Procedure	2	
Legal Bibliography	†	
Agency		2
Possessory Estates		2
	13	14

SECOND- AND THIRD-YEAR PROGRAMS

The course in Legal Aid Clinic is required of those third-year students who have not been selected to take the course in Current Decisions II. The course in Legal Ethics is required of all third-year students. For descriptions of the content of these courses, see pages 31 and 32.

With the exceptions noted above, all courses offered for the second and third years are elective. For the guidance of second-year students in 1940-41, the Faculty recommends the inclusion of the following courses in their programs of study:

<i>Subject</i>	<i>Hours per semester</i>	
Constitutional Law	2	3
Credit Transactions	2	2
Equity	2	2
Conveyancing	3	
Negotiable Instruments and Banking	3	
Pleading (Prerequisite to Practice)	3	
Business Associations I		3
Contracts II		2
Trusts		3
	15	15

For the student who wishes to take, in his second year, courses other than those listed above, the following are suggested as suitable for study in the second year:

<i>Subject</i>	<i>Hours per semester</i>	
Family Law	2	
Landlord and Tenant	2	
Municipal Corporations	2	
Future Interests		3
Wills and Administration of Estates		3

It should be distinctly understood that the courses in this second list are not suggested as either more or less suitable for study in the third year than those not included therein. In the selection of courses in addition to or in substitution for those recommended above, the student should consult the course groupings appearing at another place in this bulletin, so that he may choose those courses which will contribute most directly to his work in the field of study to which he wishes to devote his major efforts in the third year. The student intending to enter the general practice of law is cautioned, however, not to sacrifice, through undue concentration, the acquisition of a broad foundation for his subsequent activities.

The courses included in the above lists and all other courses offered are described at pages 26 to 32 of this bulletin. The courses offered which are not included in the above lists comprise:

<i>Subject</i>	<i>Hours per semester</i>	
Current Decisions I	1	1
Current Decisions II	1	1
Evidence	2	2
Legal Aid Clinic	3	2
Practice	2	2
Taxation	2	2
Administrative Law	2	
Business Associations II	3	
Conflict of Laws	3	
Debtors' Estates	3	
Insurance	2	
Legal Ethics	1	
Legal History	3	
Legislation	2	
Damages	2	
Family Law Seminar		2
Federal Jurisdiction and Procedure		2
Labor Law		2
Legislation Seminar		2
North Carolina Statutes		2
Regulation of Business		1
Regulation of Business Seminar		2
Seminar in Legal History		2
Seminar in Federal Tax Problems		2

VI. GRADUATE WORK IN LAW

GRADUATE DEGREES

The School of Law confers two graduate degrees, the degree of Master of Laws (LL.M.) and the degree of Doctor of Juridical Science (S.J.D.).

REQUIREMENTS FOR ADMISSION TO GRADUATE STUDY

Any person who shall have received the first degree in law from a law school qualified for membership in the Association of American Law Schools and whose college course and law course combined shall have occupied at least six years, may be admitted as a candidate for the degree of Master of Laws. In exceptional cases an applicant who does not meet all the above requirements may be admitted, on vote of the Faculty, to candidacy for this degree where he is able to demonstrate that he is specially qualified, as by reason of practice or teaching.

Any person holding the degree of Master of Laws from this or any other law school which is qualified for membership in the Association of American Law Schools may be admitted by the Faculty to candidacy for the degree of Doctor of Juridical Science, provided he completed the work for the Master's degree with distinction.

THE DEGREE OF MASTER OF LAWS

Upon favorable recommendation of the Faculty, the degree of Master of Laws will be conferred on students who have successfully completed during a period of residence at this School totaling at least one year a course of study approved by the Committee on Graduate Study.

The courses of study leading to this degree are designed to provide for the needs of two classes of students: (1) graduates of approved law schools who desire a fourth year of study for the purpose of undertaking an intensive study of some specialty, or who desire to broaden their legal education through the study of such subjects as jurisprudence and legal history; (2) graduates of approved law schools who desire to teach law or engage in legal research and who intend to become candidates for the degree of Doctor of Juridical Science.

One year of resident study is required for the degree of Master of Laws. No thesis is required. The course of study is prescribed by the Committee on Graduate Study after consultation with the individual student. Opportunity will be afforded the student to include in his program such second- and third-year law courses, not already completed, as are desirable for the rounding out or supplementing of his previous training. In some cases, courses in other departments of the University may be included. In the case of students whose interests lie in further preparation for practice, the course will normally include registration in subjects totaling twelve hours each semester. In the case of students interested

primarily in legal research, a lighter schedule, so far as enrollment in formal courses is concerned, may be arranged. In cases where less than twelve hours' work is prescribed for either semester, the Committee on Graduate Study may require that the student complete the work undertaken with a grade considerably higher than that required of candidates for the first degree in law.

THE DEGREE OF DOCTOR OF JURIDICAL SCIENCE

Upon favorable recommendation of the Faculty, the degree of Doctor of Juridical Science will be conferred on students admitted to candidacy for that degree who complete and submit a monograph or series of essays suitable for publication and deemed by the Faculty to be of distinguished character. At least one academic year must elapse between the awarding of the Master's degree and the awarding of the degree of Doctor of Juridical Science. Students who have received the degree of Master of Laws from another law school must spend at least one year engaged in research at this School and may in addition be required to complete a course of study prescribed by the Committee on Graduate Study.

VII. COURSES OFFERED

1. GENERAL COURSES

Torts. Liability in damages for injuries to person and property inflicted intentionally, negligently, or innocently; justification and excuse; contributory negligence; proximate cause. Liability for false representations, defamation, inducing breach of contract, interference with business relations, unfair competition, strikes, etc. Casebook to be announced. Two hours a week, first semester; three hours, second semester. PROFESSOR MAGGS

Equity. Powers of Courts of Equity and principles governing their exercise, with special emphasis on injunctions; general scope of the remedy of specific performance; part performance and the Statute of Frauds; equitable conversion; defences to specific performance; bills of peace, interpleader, *quia timet*, and to remove cloud on title. Cook, *Cases on Equity*, one-volume edition (2d ed.). Two hours a week throughout the year. PROFESSOR HORACK

Trusts. The nature, creation, and elements of a trust; charitable trusts; resulting and constructive trusts; administration of trusts; liabilities to third persons; transfer of the *cestui's* interest; persons bound by a trust; termination of a trust. Scott, *Cases on Trusts* (3d ed.). Three hours a week, second semester. PROFESSOR LOWNDES

Conflict of Laws. A study of the territorial jurisdiction of courts, the enforcement of foreign judgments, and the problems arising when the operative facts of a case are connected with jurisdictions having different rules of law. A part of the course will be directed to the study of assigned problems, utilizing related cases in the casebook for the purpose. Cheatham, Dowling, and Goodrich, *Cases and Other Materials on Conflict of Laws*. Three hours a week, first semester. PROFESSOR CAVERS

Damages. The measurement of damages with special emphasis upon the application of the standards of value and certainty, and upon the relation between the procedural and substantive aspects of damage litigation. McCormick, *Cases on Damages*. Two hours a week, first semester. PROFESSOR SHEPHERD

Family Law. A seminar approach to the cases, statutes, and sociological theories covering the contract to marry, its formation and breach; marriage; annulment; divorce; separation; property rights; and international jurisdiction. Selected materials. Two hours a week, first semester. PROFESSOR BRADWAY

Family Law Seminar. A seminar approach to the efforts of the social sciences, including the law, to deal with the intricate and perplexing problems of the modern family. Readings are assigned in legal and sociological material. Class discussions are based upon some central topic, such as divorce, domestic relations courts, etc. Written reports required in lieu of an examination. Family Law is prerequisite. Two hours a week, second semester. PROFESSOR BRADWAY

North Carolina Statutes. A study of selected statutes of North Carolina with discussion of their application, and an analysis of the decisions of the Supreme Court of North Carolina construing them. Two hours a week, second semester. PROFESSOR BRYSON

2. BUSINESS COURSES

Contracts. Sealed contracts; problems in the formation of simple contracts (making of promises and judicial standards of interpretation, offer and acceptance); the consideration doctrine; third party beneficiaries; assignments; Statute of Frauds, including legal effects of failure to comply; joint and joint and several contracts; the performance and breach of contract (conditions,

order of performance, anticipatory breach); illegal bargains (types, nature and effect of illegality), discharge of contracts. Shepherd, *Cases and Materials on Contracts*. Four hours a week, first semester; three hours, second semester.

PROFESSOR SHEPHERD

Contracts II. Specific performance as a remedy for breach of contract; mutuality; consideration and gratuitous agreements in equity; fulfillment of conditions in equity (marketable title, Laches and Statute of Limitations, partial performance with compensation and damages in lieu of specific performance); part performance and the Statute of Frauds; equitable conversion by contract.

Rescission, restitution, and quasi contractual remedies arising from consensual relations (duress, economic compulsion, misrepresentation and mistake); the parol evidence rule and reformation for mistake. Cook, *Cases on Equity*, one-volume ed.; Patterson, *Cases on Contracts II*, Vol. II. Two hours a week, second semester.

PROFESSOR SHEPHERD

Agency. Creation, duration and termination of the employment relation, including personal injury risks in the employment relation and workman's compensation; risks in business operations conducted through or for other persons, including *respondeat superior*, authority of various types of agents, managers, partners; an introduction to forms of business enterprise as bearing upon the risks (and limitations thereon) of conducting business in association with other persons. Steffen, *Cases on Agency*. Two hours a week, second semester.

PROFESSOR LATTY

Negotiable Instruments and Banking. Negotiability; execution of negotiable instruments; formal requisites of negotiable instruments; liability of parties; negotiation; holders in due course; and discharge. Legal relations between customer and banker; duties of depositor and bank toward each other; collections, and banker's lien and set-off. Aigler, *Cases on Negotiable Paper and Banking*. Three hours a week, first semester.

PROFESSOR LOWMYER

Business Associations I. Emphasis is more on corporations than on partnerships, joint-stock companies or business trusts. In approximately the following order are studied: formation of these business associations, problems of their "entity," position of the management, ultra vires, stockholders' rights and powers, stock structure and classification of shares, function of corporate capital and its bearing on dividends and stock purchases, liability on subscriptions, watered stock, stock transfer, stockholders' suits. Brief survey is given of capital reductions, capital readjustments, fundamental corporate changes and marketing of securities, all of which are studied more in detail in the Finance and Accounting course. Ballantine and Latty, *Cases and Materials on the Law of Corporations*, and selected materials on partnerships. Three hours a week, second semester.

PROFESSOR LATTY

Business Associations II—Finance and Accounting. A study of capital readjustments (but not reorganization of insolvents); capital, surplus and capital reductions; relation of accounting to ascertainment of funds available for distribution and other purposes, with introduction to book entries and emphasis on asset valuation; no-par stock; blank stock; preferred stock provisions with emphasis on the draftsman's problems and point of view; hybrid and convertible securities; corporate bonds and indentures; marketing and administrative control of corporate financing, including the provisions of relevant state or federal legislation. Latty, *Cases and Materials on Corporation Finance* (mimeographed), and other selected materials. Three hours a week, first semester.

PROFESSOR LATTY

Credit Transactions. Consideration of suretyship and guaranty, mortgages, letters of credit, trust receipts, contracts of accommodation parties on bills and notes, real property and chattel mortgages, pledges, conditional sales. Sturges, *Cases on Credit Transactions* (2d ed.). Two hours a week throughout the year.

PROFESSOR POTEAT

Debtors' Estates. A comparative study of the various legal devices available for the administration of debtors' estates—compositions, assignments for the benefit of creditors, receiverships and bankruptcy including proceedings for debtors' rehabilitation and corporate reorganization under the Bankruptcy Act. Poteat and Rostow, *Cases on the Administration of Debtors' Estates*. Three hours a week, first semester.

PROFESSOR POTEAT

Insurance. The function and theory of insurance; personal insurance (life and accident); property insurance; insurable interest; warranties and representations; assignment; waiver and estoppel. Goble, *Cases on Insurance*. Two hours a week, first semester.

ASSISTANT PROFESSOR SANDERS

Regulation of Business. See Public Law Courses, page 29, for description. Survey course, one hour a week; seminar, two hours a week, second semester.

PROFESSOR CAVERS

3. PROPERTY COURSES

Chattel Transactions. Property in chattels, application of the concepts of possession and title in the law of personal property; bailment; artisan's lien; transfer of chattels by gift and sale; contracts of sale; warranties; rights and remedies of the buyer and seller. Special attention is given in this course to judicial process and technique. Problems of chattel mortgages, pledges, and of sales financing are not considered in this course, except incidentally, but are reserved for the course in Credit Transactions. Latty, *Cases and Materials on Chattel Transactions* (mimeographed) and Woodward, *Cases on Sales* (3d ed.). Two hours a week throughout the year.

PROFESSOR LATTY

Possessory Estates. Historical introduction to real property with a detailed consideration of the modern law of possessory estates in land, including the fee simple, the fee tail, the life estate, the estate for years, concurrent estates, and the incidents of possessory ownership relative to water, lateral and subjacent support. Powell, *Cases on Possessory Estates*. Two hours a week, second semester.

PROFESSOR BOLICH

Conveyancing. Form and execution of deeds; description in deeds; recording statutes; adverse possession and prescription; incorporeal interests in land; covenants and agreements running with the land; estoppel by deed. Kirkwood, *Cases on Conveyances*, and selected materials. Three hours a week, first semester.

PROFESSOR BOLICH

Landlord and Tenant. Treatment of certain incidents of the modern law of leases relating to business, residential, and agricultural properties, including the creation of leases, their general characteristics, possession, transfer, covenants, rents, security devices, and termination. Jacobs, *Cases and Materials on Landlord and Tenant*. Two hours a week, first semester.

PROFESSOR BOLICH

Future Interests. Future interests in real and personal property; reversions; vested and contingent remainders; executory interests; rights of entry; possibilities of reverter; gifts to classes; powers; perpetuities; construction of wills and deeds as affecting the validity and characteristics of the interests created thereby. Powell, *Cases on Future Interests* (2d ed.). Three hours a week, second semester.

PROFESSOR BOLICH

Wills and Administration of Estates. The rationale of succession; mental capacity to make a will; undue influence and fraud; execution of wills; testamentary character and intent; integration of wills; revocation of wills; condition and mistake; revalidation of wills; function and necessity of probate and administration; grant of probate and administration; management, distribution and settlement of the estate. Mechem and Atkinson, *Cases on Wills and Administration* (1st ed.). Three hours a week, second semester.

PROFESSOR McDERMOTT

Trusts. See General Courses, page 26, for description. Three hours a week, second semester. PROFESSOR LOWNDES

4. PUBLIC LAW COURSES

Criminal Law and Its Administration. Survey of criminal procedure and of the lawyer's function in the administration of criminal justice; theories of crime and of punishment in the criminal law; consideration of the criminal act and of the mental element in crime; specific offenses at common law and as developed by statutes; appropriate defenses in relation to the specific crimes. Harno, *Cases and Materials on Criminal Law and Procedure* (2d ed.); Hall, *Theft, Law and Society*. Two hours a week throughout the year.

ASSISTANT PROFESSOR SANDERS

Constitutional Law. Judicial protection against arbitrary governmental action; the history of the notion of a "higher law"; the concepts applied and the constitutional clauses relied upon; the development and application of particular doctrines protecting from arbitrary governmental action individuals with respect to their persons and individuals and corporations with respect to their property and business activities. The division of fields of control between the federal and the state governments. Casebook to be announced. Two hours a week, first semester; three hours, second semester. PROFESSOR MAGGS

Administrative Law. Quasi-legislative and quasi-judicial functions of administrative tribunals, boards and officers. Constitutional limitations, growing out of the doctrine of the separation of powers and the doctrine of the non-delegability of legislative power, upon the creation and allocation of administrative functions. Practice and procedure before administrative tribunals, boards, and officers; constitutional limitations upon administrative procedure. Judicial control and review of administrative orders and decisions. Constitutional Law is prerequisite. Casebook to be announced. Two hours a week, first semester. PROFESSOR MAGGS

Labor Law. The National Labor Relations Act and related legislation. Federal and state anti-injunction statutes and their background. The law relating to strikes and the conduct of strikers, the labor agreement and the responsibility of unions. Selected materials. Two hours a week, second semester. ASSISTANT PROFESSOR SANDERS

Legislation. The interpretation of statutes; the subject matter and purpose of the statute; the context; associated words; parts of the statute in relation to the whole; extrinsic aids; statutes in relation to other statutes; statutes in relation to the common law; the applying of statutes; the operation and effect of statutes. DeSloovere, *Cases on Interpretation of Statutes*. Two hours a week, first semester. PROFESSOR McDERMOTT

Legislation Seminar. Special study and research with respect to specific legislative problems and projects, involving a complete survey of the nature and mechanics of the legislative process. Legislation is prerequisite. Selected materials. Two hours a week, second semester. PROFESSOR McDERMOTT

Municipal Corporations. The nature of municipal corporations; their external constitution; their internal constitution; their powers; their liabilities; remedies for and against municipal corporations. Stason, *Cases on Municipal Corporations*. Two hours a week, first semester. PROFESSOR McDERMOTT

Regulation of Business. A survey course considering the federal anti-trust laws and their common law background and examining selected types of federal and state regulatory legislation. Assigned readings and mimeographed materials. One hour a week, second semester. PROFESSOR CAVERS

Regulation of Business Seminar. An intensive study of a limited number of legal problems of business in their economic setting. A thesis is required. Open only to students enrolled in Regulation of Business. Two hours a week, second semester.

PROFESSOR CAVERS

Taxation. The principal taxes are considered. Special stress is laid upon the federal tax system and the major federal taxes are analyzed in some detail. The course includes the constitutional law of taxation, both in its broader aspects and in its narrower incidence upon the particular types of taxes. Lowndes, *Cases and Materials on the Law of Taxation* (mimeographed). Two hours a week throughout the year.

PROFESSOR LOWNDES

Seminar in Federal Tax Problems. This course is designed for students desiring advanced work in federal taxation. In addition to a study of the administrative and procedural aspects of the federal tax system, emphasis is laid upon the interrelation of the various federal taxes, tax control, and analysis of some of the more complex provisions of the federal tax statutes. The method of instruction is by group discussions and personal conferences with the instructor. Assigned readings and mimeographed materials. Two hours a week, second semester.

PROFESSOR LOWNDES

5. JURISPRUDENCE COURSES

Readings in Jurisprudence. The purpose of this course is to acquaint the student with the main currents of thought in legal philosophy and jurisprudence since Aristotle. Especial emphasis will be placed on critical studies of legal methodology. Enrollment in the course is limited to five. Admission only with the consent of the instructor. Two credit hours. A one-hour discussion meeting will be held each week. First semester.

[Not to be given, 1940-41.]

Legal History. A study of the development of fundamental English and American legal institutions, followed by a historical consideration of certain doctrines of the common law. Assigned readings and discussion meetings. Three credit hours. First semester.

PROFESSOR BOLICH

Seminar in Legal History. This course is designed for graduate students, and will be offered only upon recommendation of the Committee on Graduate Study. Hours and credit to be arranged with the instructor upon approval of said Committee. Second semester.

PROFESSOR BOLICH

Roman Law: Comparative Law of Obligations. The course deals primarily with the Roman law of obligations, supplemented by references to the modern German, French, and Swiss law. Emphasis is placed on method rather than on content, and the primary object of the course is to give the student a better orientation in the modern American law of contracts and torts. Knowledge of a foreign language is not essential. Intended primarily for senior and graduate students. Admission only with the consent of the instructor. Two hours a week, second semester.

[Not to be given, 1940-41.]

6. PROCEDURE AND PRACTICE COURSES

Introduction to Procedure. An introductory study of the most commonly used procedural devices by which disputes are brought before the courts for adjustment, and the techniques employed in the judicial process for effecting these adjustments, including the control of the trial court by appellate tribunals. The course will also include a study of modern reforms of pleading in so far as they are pertinent. Arnold and James, *Cases on Trials, Judgments and Appeals*. Two hours a week, first semester.

PROFESSOR POTEAT

Pleading. Remedial law as applied in code jurisdictions. The form, theory, and classification of civil actions and special proceedings, together with a complete analysis of the several pleadings available in such actions and special proceedings. Throckmorton, *Cases on Code Pleading* (2d ed.). Three hours a week, first semester.

PROFESSOR BRYSON

Practice. The practical work of lawyers; drafting instruments; preparation of pleadings and trial briefs; the various trial methods and steps taken in the trial of the case; removal of cases from state to federal courts; noting and perfecting appeals; the appeal briefs; procedure in the Supreme Court. Selected materials. Two hours a week throughout the year.

PROFESSOR BRYSON

Evidence. Admissions in pleadings, and stipulations; burden of proof, and presumptions; judicial notice; determination of admissibility of evidence; documentary evidence; parol evidence rule; witnesses; opinion testimony; the hearsay rule; circumstantial evidence; real evidence; evidence illegally obtained; contracts altering or waiving rules of evidence. Tracy, *Cases on Evidence*. Two hours a week throughout the year.

PROFESSOR McDERMOTT

Federal Jurisdiction and Procedure. Functioning of federal courts including such topics as original jurisdiction, removal of causes, the statutory court, appellate jurisdiction of the Circuit Courts of Appeal and Supreme Court. Consideration will also be given to the rules of civil procedure for the District Courts of the United States. Frankfurter and Shulman, *Cases on Federal Jurisdiction and Procedure*, revised edition, and supplementary mimeographed material. Two hours a week, second semester.

PROFESSOR POTEAT

Legal Ethics. A seminar approach to the legal problems of the lawyer and the profession. Readings are assigned in legal biography, law reform, the history of the profession, legal aid work. Class discussions cover canons of ethics, statutes, cases, opinions of grievance committees dealing with the daily problems of the practicing lawyer. A written report is required on some phase of the reform of the administration of justice. Required of all third-year students. Selected materials. One hour a week, first semester.

PROFESSOR BRADWAY

Legal Aid Clinic. The objectives of the course are: to give the student experience in actual cases; to develop creative skills, techniques and mental habits; to encourage a sense of responsibility to client, court, profession and community. Students under supervision of attorneys and in co-operation with members of the Durham bar, court officials and social agencies in the community, engage, so far as students may, in the handling of actual cases from the first interview with the client until the final disposition of the problem by litigation or otherwise. In the first semester, class discussions are devoted to problems of office organization, interviewing clients, and planning a campaign in a legal case. Individual study of selected problems, involving the use of digests, encyclopedias, case reporter series, legal periodicals, etc.; the marshaling of authorities and preparation of memoranda of law and opinions. Trial briefs are prepared for lawyers in active practice. In the second semester, the emphasis is on drafting legal documents, dealing with members of other professional groups as expert witnesses, working with two or more clients in conciliation proceedings. Appellate briefs are written for lawyers in active practice. Opportunity is afforded for special work in fields of particular interest. The course affords practical applications of the principles of legal ethics and legal etiquette. Students are expected to demonstrate adaptability to office routine, dependability in action, maturity of legal judgment. Required of all third-year students except those selected for Current Decisions II. Bradway, *Handbook of the Legal Aid Clinic*. Three hours a week, first semester; two hours a week, second semester (in two sections).

PROFESSOR BRADWAY

Bar Association Activities. Advisory work in connection with voluntary student participation in the activities of the Duke Bar Association. Not for credit.

PROFESSOR HORACK

7. LEGAL RESEARCH AND WRITING

Legal Bibliography. A historical study of the development of law books with particular emphasis upon the more important sets and classes of volumes, together with actual practice in the use of the books themselves for the purpose of developing facility in legal research. One hour a week, first semester.

MR. ROALFE

Current Decisions I. In the first semester, instruction is given in the preparation of comments on appellate court decisions by means of class analysis and criticism of comments published in law reviews and similar comments prepared by the class. In the second semester, each student, after thorough research and consultation with faculty members, prepares comments on decisions selected by the class from advance sheets. Open only to superior second-year students declared eligible by the Faculty. One hour throughout the year.

PROFESSOR CAVERS AND STAFF

Current Decisions II. Preparation, as in Current Decisions I, of comments and longer notes on significant recent decisions. Open only to, and, if elected in lieu of Legal Aid Clinic, required of superior third-year students declared eligible by the Faculty. One hour throughout the year.

PROFESSOR CAVERS AND STAFF

Student Editorial Work. Selected students, members of the class in Current Decisions, may undertake the preparation of studies for publication in *Law and Contemporary Problems* under the supervision of the editor. Credit for this work will be given in Current Decisions.

PROFESSOR CAVERS

The foregoing courses as offered for the year 1940-41 are subject to such changes as may be found necessary.

Upon recommendation of the Committee on Graduate Study, seminars not listed in the bulletin may be created or arrangements made for supervision of special research by individual students in any subject.

VIII. STUDENTS

ENROLLMENT FOR 1939-40

FIRST-YEAR CLASS

Barackman, Bruce A.B., Allegheny College, 1939.	Meadville, Pa.
Berkemeyer, Donald Johnston A.B., Oberlin College, 1939.	Webster Groves, Mo.
Bolte, Henry Ferdinand A.B., Duke University, 1939.	Elmhurst, N. Y.
Boutwell, Rufus Cecil, Jr. Duke University, 1936-39.	Durham, N. C.
Breckenridge, John B. A.B., William Jewell College, 1939.	Plattsburg, Mo.
Brown, B. Horace B.A., Maryville College, 1939.	Maryville, Tenn.
Brown, Milton Haynes B.S. in Commerce, Carson-Newman College, 1939.	Erwin, Tenn.
Carnahan, A. Vernon A.B., Brothers College, Drew University, 1939.	Saltsburg, Pa.
Clark, Carl Cameron B.S., Davidson College, 1939.	Hiwassee Dam, N. C.
Coplan, Edwin Duke University, 1936-39.	Columbia, S. C.
Corboy, John Gilbert A.B., Duquesne University, 1939.	Pittsburgh, Pa.
Donovan, Frank X. A.B., Elon College, 1939.	Floral Park, N. Y.
Doyle, James Jerome B.A., Rutgers University, 1939.	Morristown, N. J.
Everett, Robert James Duke University, 1936-39.	Kingston, N. Y.
Fechter, Robert Mordecai A.B., College of Charleston, 1939.	Charleston, S. C.
Fogle, Charles D., Jr. A.B., Marietta College, 1939.	Marietta, Ohio
Fuller, Donald Whitcomb A.B., Hamilton College, 1939.	Endicott, N. Y.
Fuston, Sam Del Duke University, 1936-39.	Murfreesboro, Tenn.
Hambrick, Jackson Reid A.B., Wofford College, 1938.	Spartanburg, S. C.
Holmes, Reid Thomas A.B., Duke University, 1939.	Wildwood, N. J.
Hyde, Joan B.A., New Jersey College for Women, 1938.	New York City
Kimbrell, William Clarence B.A., Washington and Lee University, 1932.	Durham, N. C.
Lamberson, Ralph Tiffin A.B., University of Michigan, 1938.	Colon, Mich.
Levinson, Joe Herman A.B., Duke University, 1939.	Benson, N. C.

- Lohr, William James
A.B., Baldwin-Wallace College, 1939.
- Lundholm, John Edward
A.B., Catawba College, 1939.
- McCall, Samuel Horace, Jr.
B.S., Davidson College, 1939.
- MacCuish, Inez Dorothy
B.S., New York University, 1939.
- Malone, Thomas Patrick
Duke University, 1936-39.
- Metz, Jean Lois
Duke University, 1936-39.
- Nelson, Frederick
A.B., University of Washington, 1939.
- Nunn, Henry Philip
A.B., Duke University, 1939.
- Owen, William Nathaniel
A.B., Duke University, 1937.
- Owens, Herman Franklin, Jr.
The Citadel, 1936-37; Duke University, 1937-39.
- Pollack, George Bernhard
B.A., Rutgers University, 1939.
- Puckett, Robert Stephens
A.B., Duke University, 1939.
- Ralston, Adolph Henry
Duke University, 1936-39.
- Repko, John Francis
A.B., Temple University, 1939.
- Richardson, C H, Jr.
A.B., Bucknell University, 1938; A.M., 1939.
- Sawyer, Thomas B.
A.B., Duke University, 1938.
- Smith, Louis Van
A.B., High Point College, 1938.
- Strain, John Francis
A.B., Stanford University, 1939.
- Truesdale, Sidney Louis
A.B., Duke University, 1939.
- Unger, Maurice Albert
Duke University, 1936-39.
- Varlan, Nicholas Peter
A.B., Syracuse University, 1939.
- Wasem, George Mathew
A.B., Illinois Wesleyan University, 1939.
- Winger, Maurice
A.B., William Jewell College, 1939.
- Bay Village, Ohio
- Wildwood, N. J.
- Troy, N. C.
- New York City
- Mahanoy City, Pa.
- Jersey City, N. J.
- Seattle, Wash.
- Winston-Salem, N. C.
- Schenectady, N. Y.
- Fountain, N. C.
- Perth Amboy, N. J.
- Birmingham, Ala.
- Middlesboro, Ky.
- Freeland, Pa.
- Lewisburg, Pa.
- Greensboro, N. C.
- High Point, N. C.
- Muscatine, Iowa
- Winston-Salem, N. C.
- Patchogue, N. Y.
- Rochester, N. Y.
- New York City
- Kansas City, Mo.

SECOND-YEAR CLASS

- Anderson, William Kimbrough
B.S., Kent State University, 1936.
- Arst, Norton Jerome
A.B., Louisiana State University, 1938.
- Barkman, Francis Elwood
A.B., St. John's College, 1938.
- Bragg, Harold Hoffman
A.B., Baker University, 1938.
- Kent, Ohio
- Drew, Miss.
- Cumberland, Md.
- Dodge City, Kan.

- Carr, Aute Lee
A.B., Butler University, 1938.
- Cooprider, Virgil Wayne
A.B., Kansas State Teachers College, 1938.
- Dixon, Daniel Robert
A.B., The College of William and Mary, 1937.
- Fischer, Charles Henry, Jr.
A.B., Duke University, 1938.
- Frampton, George Thomas
A.B., Duke University, 1938.
- Gentithes, George Harry
A.B., Mount Union College, 1938.
- Gordon, Eugene Andrew
Elon College, 1935-37; Duke University, 1937-38.
- Harvey, Thomas William, Jr.
A.B., Marshall College, 1939.
- Horack, Benjamin Shambaugh
A.B., Duke University, 1939.
- Kaufman, Howell Boucher
B.S., Johns Hopkins University, 1938.
- Kerr, Ben Ransom
A.B., Duke University, 1939.
- Leavenworth, Robert Wing
A.B., Duke University, 1938.
- Lenox, Walter Stanley
A.B., Duke University, 1938.
- Lipscomb, Woodrow Pershing
A.B., Duke University, 1938.
- McCormack, Edward Joseph
A.B., University of Newark, 1935; B.S., Rutgers University, 1937.
- Mack, Edwin Van Tuyl
A.B., Duke University, 1938.
- Malone, William Frank
A.B., Western Maryland College, 1938.
- Marshall, Archibald George
A.B., Duke University, 1939.
- Mattocks, James Richardson
A.B., High Point College, 1938.
- Mims, Frank Meyer
B.A., The University of New Mexico, 1938.
- Moore, Hervey Studdiford, Jr.
A.B., Duke University, 1939.
- Moran, John William
A.B., Lenoir-Rhyne College, 1938.
- Moscoso, Guillermo
University of Puerto Rico, 1932-35.
- Rebman, Andrew Frederick, III
A.B., Duke University, 1938.
- Schultz, Herman L.
B.S., State University of Iowa, 1938.
- Sink, Henry Harrison
A.B., Duke University, 1939.
- Smith, LaRue, Jr.
Stanford University, 1933-35; Montana State University, 1935-38.
- Smith, Numa Lamar, Jr.
B.A., Furman University, 1938.
- Grover Hill, Ohio
- Pawnee, Okla.
- Rocky Mount, N. C.
- West Haven, Conn.
- Scarsdale, N. Y.
- Warren, Ohio
- Brown Summit, N. C.
- Huntington, W. Va.
- Durham, N. C.
- Timonium, Md.
- Murfreesboro, Tenn.
- New Haven, Conn.
- Ridgefield Park, N. J.
- Hinton, W. Va.
- Irvington, N. J.
- Rutherfordton, N. C.
- Allen, Md.
- Branford, Conn.
- High Point, N. C.
- Mountainair, N. M.
- Trenton, N. J.
- North Platte, Neb.
- Mayaguez, P. R.
- Courtland, Ala.
- Belmond, Iowa
- Greensboro, N. C.
- Great Falls, Mont.
- High Point, N. C.

Stack, Warren Carlisle
A.B., Duke University, 1939.
Tinsley, James Jones
A.B., Wofford College, 1938.
Watson, William Harry, Jr.
A.B., Dartmouth College, 1938.
Wherrett, Norman Lewis
A.B., Duke University, 1938.
Williams, Berry Collins
A.B., Duke University, 1938.
Williams, Bill Justin
A.B., Duke University, 1938.

Monroe, N. C.
Spartanburg, S. C.
Keene, N. H.
Wilmington, Del.
Fayetteville, Tenn.
Fayetteville, Tenn.

THIRD-YEAR CLASS

Adams, Margaret Louise
A.B., Duke University, 1938.
Arnold, Herman Ross, Jr.
B.A., Furman University, 1937.
Beattie, Frank John
A.B., Oberlin College, 1931.
Daniels, George Neil
B.S., Davis and Elkins College, 1932.
Foster, Elliott Orman, Jr.
A.B., Bates College, 1937.
Garber, Murray Roger
A.B., Duke University, 1938.
Gracey, Hugh Catron
B.S., Davidson College, 1937.
Harris, Roger Kennedy
A.B., Duke University, 1937.
Hassel, Merrill Lynnwood
A.B., Duke University, 1938.
Hayes, Johnson Jay, Jr.
B.A., Wake Forest College, 1937.
Hendricksen, Burnell Howe
A.B., University of South Dakota, 1938.
Hovey, George Dunmore
B.S., Lafayette College, 1937.
Josephs, Alex Rustin
Centre College, 1934-35; Duke University, 1935-37.
Keene, Spotswood Hughes
A.B., Randolph-Macon College, 1937.
Klein, Joseph
Northwestern University, first semester, 1933-34; Wright Junior College, 1934-35;
Northwestern University, 1935-37.
Koop, Charles Thomas
A.B., Duke University, 1938.
Laufer, Joseph
Karls Gymnasium, 1925-27; University of Berlin, 1927-28; University of Heidelberg, 1928-29; University of Tübingen, 1929-31.
Little, James Crawford
A.B., Duke University, 1938.
McCoy, John Oliver
A.B., Duke University, 1938.
Malmquist, Tord Vincent
A.B., Marshall College, 1937.
Esterly, Pa.
Jacksonville, Ala.
New London, Ohio
Elkins, W. Va.
Millbury, Mass.
Bradford, Pa.
Franklin, Tenn.
Newport, Ark.
Bart, Pa.
Wilkesboro, N. C.
Viborg, S. D.
Atlantic Beach, Fla.
Charlotte, N. C.
Ashland, Va.
Chicago, Ill.
Islip, N. Y.
Durham, N. C.
Raleigh, N. C.
Glen Jean, W. Va.
Huntington, W. Va.

Missal, Harold Milton Ph.B., Dickinson College, 1935.	Bristol, Conn.
Moore, John Shelby A.B., Duke University, 1937.	Bridgeport, W. Va.
Moose, William Lewis, III B.A., Hendrix College, 1936.	Little Rock, Ark.
Page, Hugh Alexander, Jr. Duke University, 1932-36.	Clayton, N. C.
Pope, Harrell A.B., Duke University, 1938.	Dunn, N. C.
Poyner, James Marion B.S., North Carolina State College of Agriculture and Engineering, 1935; M.S., 1937.	Raleigh, N. C.
Raub, Benjamin Dimmick, Jr. A.B., Lafayette College, 1937.	Easton, Pa.
Rouzer, Elmer Ellsworth A.B., Duke University, 1938.	Hagerstown, Md.
Shepard, James Schumann A.B., Wabash College, 1937.	Columbia City, Ind.
Stone, Russell DeLeon A.B., Duke University, 1938.	Wilmington, N. C.
Tunnell, Robert White A.B., Muskingum College, 1937.	Georgetown, Del.
Turner, Charles Fletcher A.B., Duke University, 1938.	Birmingham, Ala.
Vandenburgh, Edward Clinton, III B.S., Iowa State College of Agriculture and Mechanic Arts, 1937.	Sioux City, Iowa
Wanless, Julian Thor A.B., DePauw University, 1937.	Springfield, Ill.
Weinstein, Maurice Aaron A.B., Duke University, 1938.	Salem, N. J.
Welfare, Bradley Lamar, Jr. A.B., Duke University, 1937.	Winston-Salem, N. C.

GRADUATE STUDENTS

Carswell, Robert McLean LL.B., John B. Stetson University, 1938; A.B., 1939.	Kissimmee, Fla.
McLeod, John Blount LL.B., Wake Forest College, 1922; A.B., University of North Carolina, 1939.	Lumberton, N. C.

INSTITUTIONS REPRESENTED

Allegheny College	Dickinson College
Baker University	Drew University
Baldwin-Wallace College	Duke University
Bates College	Duquesne University
Bucknell University	Elon College
Butler University	Furman University
Carson-Newman College	Hamilton College
Catawba College	Hendrix College
College of Charleston	High Point College
College of William and Mary	Illinois Wesleyan University
Dartmouth College	Iowa State College of Agriculture and Mechanic Arts
Davidson College	John B. Stetson University
Davis and Elkins College	Johns Hopkins University
DePauw University	

Kansas State Teachers College	Stanford University
Kent State University	State University of Iowa
Lafayette College	Syracuse University
Lenoir-Rhyne College	Temple University
Louisiana State University	University of Michigan
Marietta College	University of Montana
Marshall College	University of New Mexico
Maryville College (Tennessee)	University of North Carolina
Mount Union College	University of Puerto Rico
Muskingum College	University of South Dakota
New Jersey College for Women	University of Tübingen
New York University	University of Washington
North Carolina State College	Wabash College
Northwestern University	Wake Forest College
Oberlin College	Washington and Lee University
Randolph-Macon College	Western Maryland College
Rutgers University	William Jewell College
St. John's College (Maryland)	Wofford College

STATES AND FOREIGN COUNTRIES REPRESENTED

Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Tennessee, Virginia, Washington, West Virginia. Total, 32.

GENERAL SUMMARY

First-Year Class	47
Second-Year Class	38
Third-Year Class	36
Graduate Students	2
<i>Total Enrollment</i>	123
Total Number of Institutions Represented	63
Total Number of States and Foreign Countries Represented	32

DEGREES AWARDED IN JUNE, 1939

BACHELOR OF LAWS

Arnold, Hubert Kennard	Hyattsville, Md.
A.B., University of Maryland, 1935.	
Betts, Willard Furman, Jr.	Raleigh, N. C.
A.B., University of North Carolina, 1936.	
Blackburn, James William, Jr.	Bowling Green, Ky.
Western Kentucky State Teachers College, 1931-34.	
Bogue, Robert William	Parker, S. D.
B.A., University of Wisconsin, 1936.	
Bomar, Fleming Brown	Spartanburg, S. C.
A.B., Wofford College, 1936.	
Burwell, George Allen	Warrenton, N. C.
A.B., Duke University, 1937.	
Carden, Russell Campbell	Chattanooga, Tenn.
A.B., Duke University, 1937.	
Cooley, Edward William	Wheeling, W. Va.
A.B., Duke University, 1936.	

- Denceen, Russell Sanders
A.B., Duke University, 1937.
- Desvernine, Eugene
A.B., Duke University, 1937.
- Forsythe, John Samuel
Geneva College, 1933-36.
- Gibbs, Charles Haskell
A.B., College of Charleston, 1936.
- Griffith, Erma Ellen
A.B., Duke University, 1937.
- Hoffman, John Edward
A.B., Duke University, 1937.
- Knapp, James Edward
A.B., Duke University, 1937.
- Lowe, James Russell
A.B., Duke University, 1936.
- Mann, Oliver DeWitt
A.B., Duke University, 1936.
- Margraf, Gustav Benhart
A.B., Southeast Missouri State Teachers College, 1936.
- Maxwell, Lylton Ethridge
A.B., Duke University, 1936.
- Meyerson, Stanley Phillip
A.B., Duke University, 1937.
- Morrah, Patrick Bradley, Jr.
A.B., The Citadel, 1936.
- Oakes, John Campbell
B.S., State Teachers College of Tennessee, 1936.
- Powell, Rufus Heflin, III
A.B., Duke University, 1936.
- Reid, Edwin Kitchen
A.B., Syracuse University, 1936.
- Renner, Charles Victor
A.B., Marietta College, 1936.
- Sanders, Richard Tatum
A.B., Baylor University, 1935.
- Stoner, James Byron
A.B., Stanford University, 1937.
- Tomlinson, Benson Cahoon
Southeast Missouri State Teachers College, 1933-36.
- Turlington, David James, Jr.
Duke University, 1933-36.
- Womble, William Fletcher
A.B., Duke University, 1937.
- Bakersville, N. C.
- Buen Retiro, Marianao,
Havana, Cuba
- Rocky Mount, Va.
- Charleston, S. C.
- Lebanon, Va.
- Fort Wayne, Ind.
- Irasburg, Vt.
- Elon College, N. C.
- Whitakers, N. C.
- Cape Girardeau, Mo.
- Pink Hill, N. C.
- Charleston, S. C.
- Greenville, S. C.
- Johnson City, Tenn.
- Durham, N. C.
- Albany, Ga.
- Parkersburg, W. Va.
- Sherman, Tex.
- Los Angeles, Calif.
- Fornfelt, Mo.
- Clinton, N. C.
- Winston-Salem, N. C.

DUKE UNIVERSITY



Views on Two Campuses

WEST, OR UNIVERSITY, CAMPUS

EAST, OR WOMAN'S COLLEGE, CAMPUS

[WHILE THIS FOLDER REFERS IN A GENERAL WAY TO THE GRADUATE AND THE PROFESSIONAL SCHOOLS, MOST OF THE MATTER APPEARING HEREIN PERTAINS TO THE TWO UNDERGRADUATE COLLEGES OF DUKE UNIVERSITY—TRINITY COLLEGE FOR MEN AND THE WOMAN'S COLLEGE.]

ORIGINS

Duke University, founded by James B. Duke in 1924, includes Trinity College for men, which goes back in its origins to 1838 and continues to exist as an important part of Duke University, the Woman's College, the Graduate School of Arts and Sciences, School of Religion, School of Law, School of Medicine, School of Nursing, the Summer Schools, the School of Forestry, and the College of Engineering.

BUILDINGS

The buildings for the various schools and departments are located on two campuses of about 5,200 acres, Gothic architecture being the prevailing type on the new West, or University, campus, and Georgian on the East, or Woman's College, campus.

STUDENTS

For the academic year 1938-39, forty-five states of the Union and several nations were represented in the student body of over 3,400 students. This does not include, of course, the enrollment of the summer schools. There were 3,015 registrations in the 1939 summer schools.

FACULTY

The faculty and administration of the University number more than 500 persons, including men and women widely known in the educational life of this and other nations.

LIBRARIES

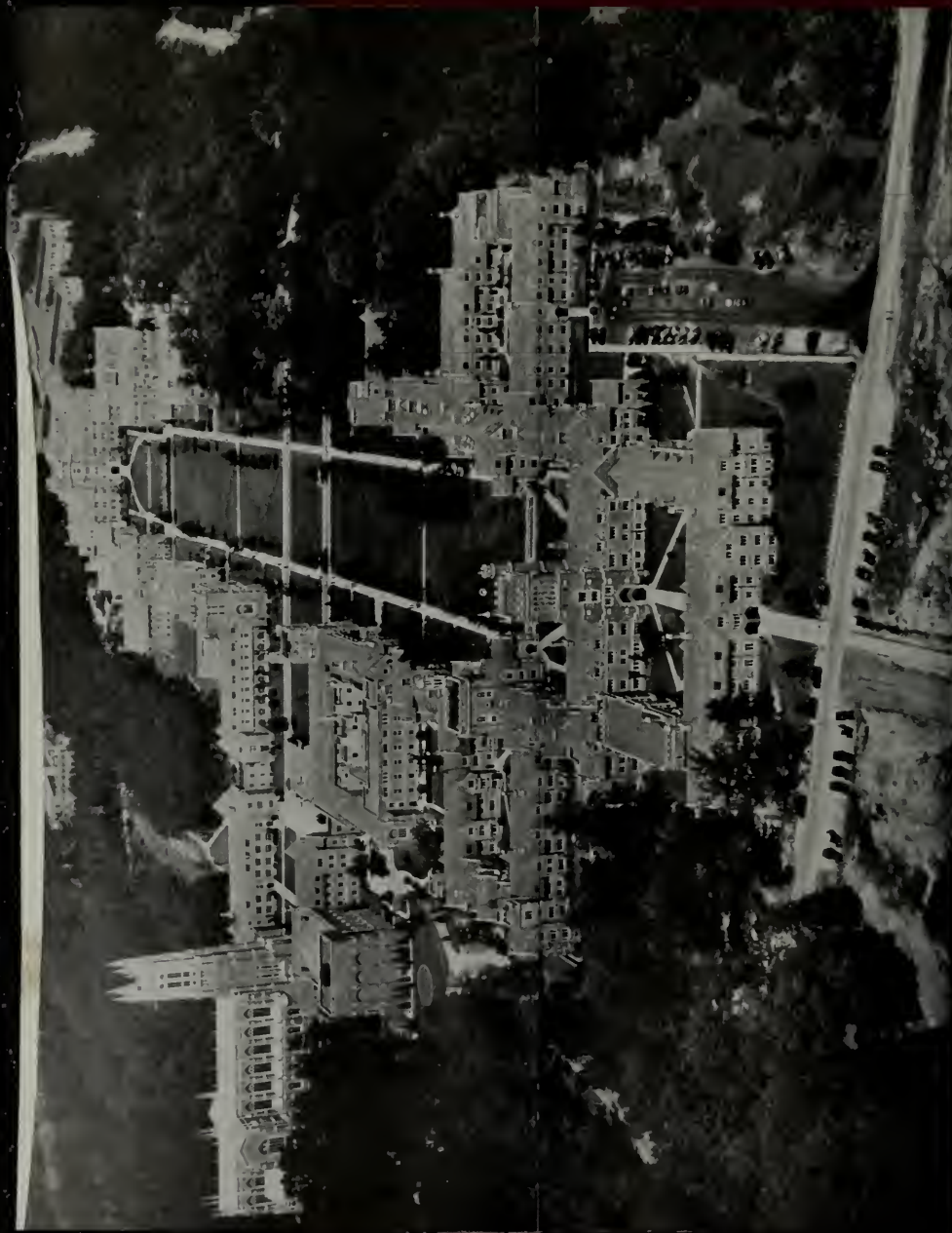
In the five University libraries (the General Library, the Woman's College library, the Hospital library, the Law library, and the School of Religion library) there are 560,000 volumes.

HOSPITAL

The Duke Hospital, complete to the last detail, offers exceptional facilities for the treatment of students.

COLLEGE LIFE

A variety of interests outside those of the classroom and laboratory await the participation of the undergraduate student at Duke University. There are fields of activity suited to every inclination and talent, and the many organizations associated with these activities present a fine opportunity for the development of leadership.



Air View of the West, or University, Campus

Without and Within the Chapel



The Pulpit, the Choir, the Organ.



Nave or main body of the Chapel, looking toward the Chancel.

The Tower contains a Carillon of fifty bells.

An edifice which dominates the entire campus; its Tower rises 210 feet.

The Sarcophagi of Benjamin N. Duke, Washington Duke, and James B. Duke.



Pleasant Scenes in Spring



One view of the Duke Hospital.



Colonnade of the University Union.



A sweeping
view of
the West
side of the
main
Quadrangle.





Another view of Duke Hospital

INTRAMURAL

Every student, under the University's extensive intramural athletic program, is expected to participate in several of many forms of athletics. This intramural program, under the supervision of the University Director of Athletics, Wallace Wade, calls for games between classes, fraternities, houses, and other groups.

PUBLICATIONS

Work on the various student publications appeals to many. These include the Chronicle, semi-weekly newspaper; the Archive, monthly literary magazine, and the Chanticleer, the Duke annual.

DRAMATICS

Dramatics hold the interest of many. The Duke Players give performances from time to time.

MUSIC

In the realm of music there is much both for student singers and instrumentalists. Also there are special musical programs by noted artists. And the University's own carillon and chapel organ never cease to appeal to the music-lovers on the campus.

SOCIAL

There is a complete building on each campus devoted largely to social and recreational uses—the Union.

CHAPEL SERVICES

Preaching services in the University Chapel each Sunday morning during the academic year draw hundreds of students. Many opportunities for the development of leadership are afforded by the "Y" organizations and the student government groups.

"ORIENTATION WEEK"

A special "Orientation Week" for freshmen is observed at the opening of each academic year and special attention is given new students throughout the year.

ACTIVITIES

College life at Duke is well rounded and offers ample social and recreational activities to balance those which the academic routine requires.



Thrilling moment in Football Game in Duke Stadium



Entrance to
House "A"
in the
Craven
group.



Right (above) the Union, Kilgo House, "Clock Tower"; middle a part of
Crowell House; below: classroom buildings (Gray and School of Religion).

The
General Library,
where part
of nearly 500,000
Duke volumes
are housed.



A Place to Work
A Place to Play
A Place to Live



Gateway to the University Campus.



Towers, arches, trees, green lawns—a Quadrangle view.



The students' campus home—the dormitory section.

Gothic Atmosphere Pervades West Campus



The reference room of the General Library.



There are many Candidates for the Varsity Teams



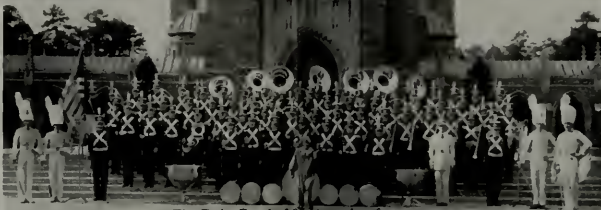
Spring brings the Baseball team into action.



Varsity Boxers.



The Swimming team performs in Duke gymnasium pool.



The Duke Band of 95 pieces is a feature at football games.



Golfers win titles.



The Football team annually ranks among the best in the nation.



Cross-country runners.



Gridders team is outstanding.

The gridders play before great crowds—93,000 watch them in the Rose Bowl.





One of the ten sorority rooms, Pan-Hellenic House,
Woman's College Campus

EXPENSES

Regarding undergraduate expenses, a minimum of \$574.50 for the following necessary items of expense incident to an entire academic year at Duke University in the two undergraduate colleges is possible. The figures given below, however, represent maximum, and not minimum, costs:

*For an Entire
Academic Year*

Tuition.....	\$200.00
Matriculation.....	50.00
Room Rent.....	\$100.00 to 125.00
Board.....	225.00
Athletic Fee.....	10.00
Damage Fee.....	1.00
Medical Fee.....	10.00
Library Fee.....	10.00
Commencement Fee.....	3.00
Publications Fee.....	5.50

\$639.50

Books, laundry and necessary incidental expenses are variable and cannot be figured so readily. Adding to the above figures a reasonable amount for those items, the total of necessary expenses of all kinds for an academic year can be kept well within the sum of \$750, using the most liberal basis of figuring expenses in the few items where variations are possible. In the case of a student whose room rent is \$100, the total of all necessary expenses will come within \$725, instead of \$750.

ATHLETICS

Duke University athletic teams of 1939-40 continued the institution's reputation of having high-class squads in all lines of sports. The football team again received high national ranking, receiving only one defeat—by 14-13 at the hands of Pittsburgh. The gridders won the Southern Conference championship for the second straight year and for the fourth time in five years. George McAfee, sensational half-back, was named on many All-America teams. And again the largest regular season crowd in the South—more than 50,000—came to Duke stadium on November 18 to see the annual Duke - North Carolina game. Baseball, golf and basketball teams were ranked with the best in the country, the golfers finishing fourth—five strokes behind the leader—in the national intercollegiates at Des Moines, Iowa. Tennis, track, wrestling, boxing, swimming, lacrosse, cross-country and soccer teams also had fine campaigns. The extensive intramural program attracted a record-breaking number of students. A highlight of the year was the formal opening of the new gymnasium unit, seating 9,500 people. It is one of the most modern physical education plants in the nation.

For the ninth year, the program was directed by Wallace Wade, Director of Athletics and Head Football Coach.

OPENING

The formal opening of the eighty-ninth session of Duke University will be held on September 18, 1940.



Section of Art Exhibit in Library, Woman's College Campus



Eight hundred Alumni banqueting in the University Union.

The "Milling Throng" and Quiet Gardens on the Same Campus



Physical education and special gymnasium classes make the University Gymnasium one of the busy campus spots throughout the day.



Largest crowd in history of football in the South, more than 40,000 persons, witnessing the Duke-Carolina game of 1935 in the Duke Stadium. Duke won, 25-0.

The Gymnasium is equipped with a swimming pool and apparatus for every form of exercise.



The Senior Walk, one of the many quiet paths that wind through the large campus. Nearby Duke Forest contains many convenient picnic grounds and fine hiking terrain.



There are many thousands of iris bulbs and other floral plants in the eight-acre Sarah P. Duke Gardens.



The Glee Club is one of the University's finest musical organizations, and takes annual spring and fall tours.



The Chapel is seen from the garden borders in the Sarah P. Duke Gardens.



Here are the cheer leaders who are prominent at every athletic event.

The University Chapel Choir poses on the steps of the chapel.



There's an Activity for Every Interest on the Duke Campuses



A close finish at one of the varsity track meets.

An interesting musical feature are the regular carillon recitals. This is a scene at an evening recital.



For the graduating classes this scene is one of prime importance—commencement.



A little horse-play enlivens things on the campus. This is an initiation scene.



The raising of the flag is a traditional ceremony that marks the beginning of each academic year.



And here's one of the most exciting moments of the college year—the kickoff at an important football game.

There is a flag-raising ceremony to open the year at the Woman's College.



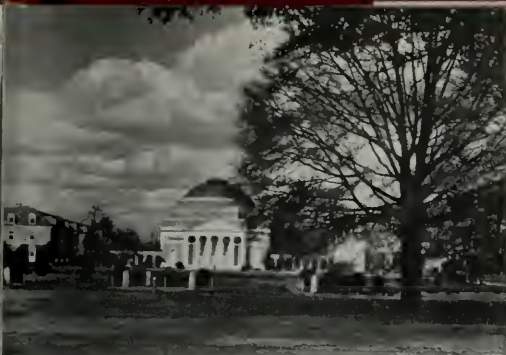
Dramatic and musical talent are combined to stage colorful operettas.





Air View of the East, or Woman's College, Campus

The Woman's College Campus



The Quadrangle, toward the Auditorium. Most of the college buildings are of Georgian architecture.



A Gateway.
A granite wall surrounds the entire campus.



Left: A glimpse of two of the Dormitories.



View of portion of Quadrangle. Columns of the Union at the right.

The Women's Campus is Attractive, Throughout the Year



The College Auditorium is at the head of the large Quadrangle.



Classes of the College have cooperated in improving the landscape



Grounds of the Woman's College are loved by students, admired by visitors.



In addition to a fine collection of books, the College Library has a notable art collection.



East Duke Building. One of the Trinity College buildings prior to 1925

Annie Roney Fountain, one of the oldest campus landmarks



Students in the Woman's College are Active Indoors and Out



Girls leaving the Auditorium after the morning assembly.



One of the beautiful parlors of East Duke building, the Anna Branson Memorial Room.



A Riding class.



The "Chorus" in an Operetta.



Each spring the May Day Festival is witnessed by thousands. The college lawn makes an ideal setting for the coronation.



Girls, as well as their "dates", enjoy the bowling alleys of the Ark, the college recreation center.

One of the most popular spots on the campus is the Memorial Gymnasium. The women students also have a swimming pool of their own.





"Close-up" photograph of front of Woman's College Auditorium, representative of Georgian Architecture on the East Campus. This is in striking contrast to the Tudor Gothic on the West Campus, as illustrated by the "clock tower" dormitory view on the front cover.

ADMISSION—HOW TO APPLY

Applications for admission to any of the Schools or Colleges of the University must be on file in the Office of Admissions not later than September 1. Those applying for admission to Trinity College, the undergraduate college for men, should address the Secretary, Duke University, Durham, N. C.; applications for admission to the Woman's College should be directed to the Committee on Admissions, College Station, Durham, N. C.

For further information about the Undergraduate Colleges, or the Graduate and Professional Schools, address: The Secretary, Duke University, Durham, N. C.



BULLETIN OF
DUKE UNIVERSITY
 VIEWS ON TWO CAMPUSES

VOLUME 12

MARCH, 1940

NUMBER 5-B

Published by Duke University monthly except in July, Aug., Sept. and Dec. Entered as second

DUKE UNIVERSITY



COLLEGE OF ENGINEERING

CURRICULA

The College of Engineering of Duke University offers complete undergraduate instruction in civil, electrical, and mechanical engineering, leading to the degrees of Bachelor of Science in Civil, Electrical, and Mechanical Engineering, respectively.

BUILDINGS

Four buildings, conveniently grouped on the East Campus, house the activities of the College of Engineering.

In *Asbury Hall* are located the administrative offices of the College of Engineering, a number of class and project rooms, the Engineering Library, well-lighted general drafting rooms, and the offices and laboratories of the Department of Electrical Engineering.

Birns Hall contains the offices and laboratories of the Department of Civil Engineering, a Junior-Senior drafting room, and classrooms.

Branson Hall houses the offices of the Department of Mechanical Engineering and the Mechanical Engineering Laboratories.

Dormitory facilities for all engineering students are provided in *Southgate Dormitory*, a modern fireproof structure located adjacent to the other engineering buildings.

EQUIPMENT

The civil engineering equipment embraces an

Indeterminate Structures Laboratory, a large assortment of both ordinary and precision type surveying instruments, a Sanitary Engineering Laboratory, a Highway Laboratory, a Cement Testing Laboratory, a Materials Testing Laboratory, and a Photo-Elastic Laboratory.

The electrical engineering equipment includes an Electrical Machinery Laboratory provided with all the usual types of a-c and d-c apparatus, a Communications Laboratory containing radio and telephone apparatus, an Electronics Laboratory for vacuum tube studies, a Standardizing Laboratory, a Projects Laboratory, an Electrical Circuits Laboratory, as well as a regularly licensed amateur radio broadcasting station—W4AHY.

The Mechanical Engineering Laboratories include a Main Laboratory with steam, air, internal combustion and hydraulic machinery, together with all necessary auxiliary steam and electrical equipment; a Boiler Room, a Fuels Testing Laboratory for fuels of all types; an Oil Testing Laboratory providing complete testing facilities for lubricants; and an Instrument Calibration Laboratory.

The Engineering Library is an integral part of the General University Library and contains an adequate collection of books, periodicals and other literature pertaining especially to engineering.

Civil



Field Surveying

A three-weeks summer course following the Freshman year gives every prospective engineer field practice in the use of transit, stadia, compass, and plane table. Further work in surveying is given in advanced civil engineering courses.



Hydrographic Surveying

Stream gauging equipment from Sanitary Engineering Laboratory being used in the field by students.



Engineering



A student using a Begg's Deformeter in the Indeterminate Structures Laboratory.

A corner of the Bituminous Laboratory used for the testing of bituminous highway materials.

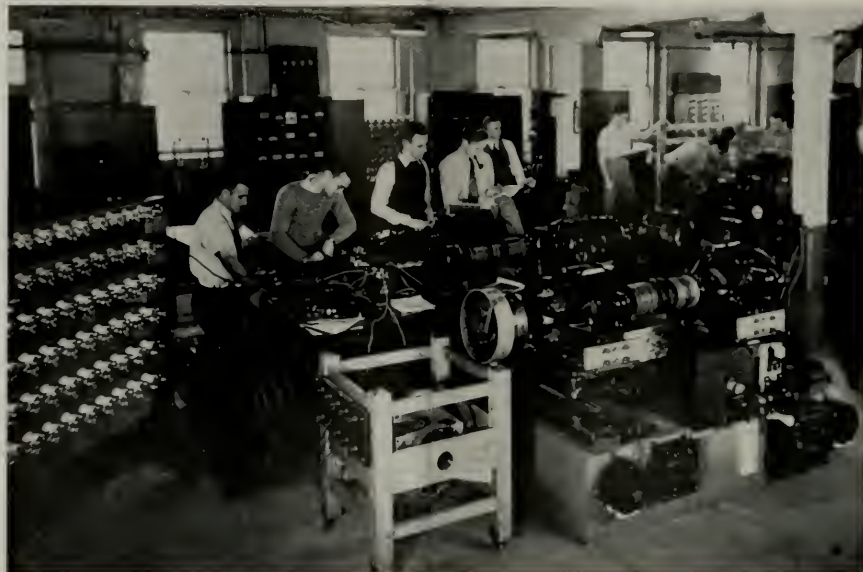


Strength of Materials Laboratory

The upper picture shows a section of this laboratory with a universal testing machine and a torsion testing machine.

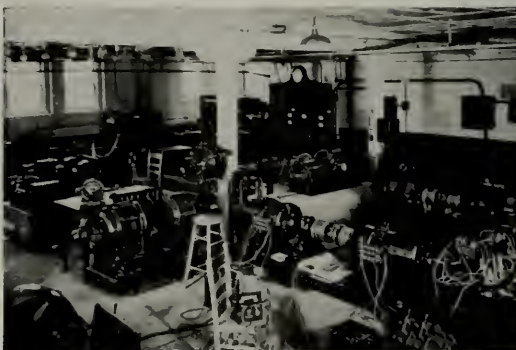
The lower picture shows the use of a "proving ring" for the calibration of a testing machine.





Electrical Machinery Laboratory

Here engineering students receive practical training in the theories underlying the generation, distribution, control and utilization of electrical energy.



Electrical Engineering

Electrical Circuits Laboratory in which theories of direct and alternating currents are verified by experiment.



Electronics Laboratory with complete equipment for studies of vacuum tubes and related apparatus.



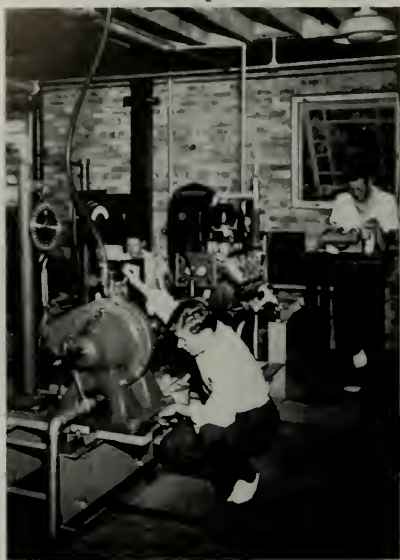
Standardizing Laboratory equipped with laboratory standard type precision instruments for checking and calibrating instruments and meters.

Communications Laboratory containing high frequency apparatus for studying the transmission of speech and sound by radio and telephone.



Amateur Radio Broadcasting Station (W4AHY) providing engineering students as well as members of the Engineers Radio Association with a working knowledge of radio transmission and reception.





Internal combustion engine under test with hydraulic dynamometer loading.



A typical test bench set up for fuel analysis.

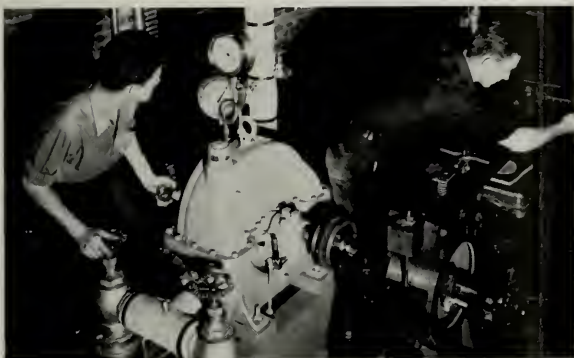
Single Cylinder Diesel generating set and control panel.



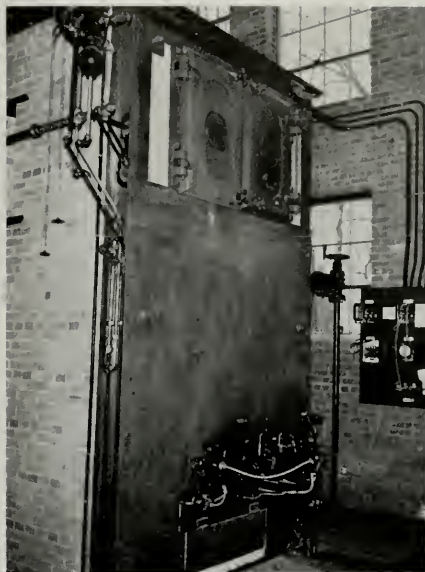
Steam engine and turbine section of laboratory test floor.



Mechanical Engineering



Steam turbine loaded by Prony brake during water-rate test.



Oil-burning 100 hp water-tube Keeler boiler for supplying laboratory with steam.

Efficiency test on electrically driven hydraulic pump.



Air compressor performance test in Senior Laboratory.



Southgate Hall



The Dormitory for Engineering Students.

The social rooms of Southgate Hall provide comfortable accommodations for relaxation and recreation.



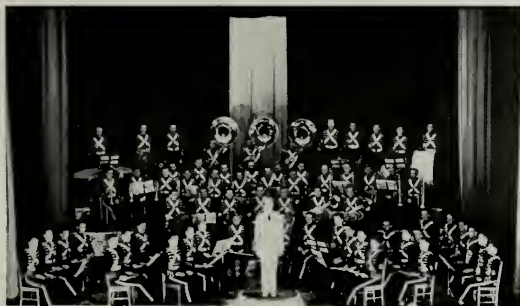
Highly enjoyable social occasions are held frequently in Southgate Dormitory.



Activities of Engineering Students



The Engineering Library in Asbury Hall affords a quiet place for study.



The Duke University Band. All such student activities of the University are open to interested engineers.



Engineering students in their cheering section at a football game.

*A football game in Duke Stadium.
Many engineers have distinguished themselves in intercollegiate athletics.*



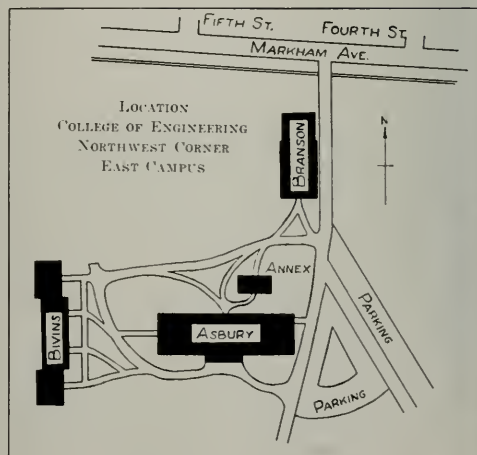


General Drafting Room in Asbury Hall used by Freshmen during regular instruction in Engineering Drawing.

Exhibition of materials testing at annual Engineers' Show.



20-3



Opportunities and Advantages of Engineering Students at Duke

The College of Engineering, by reason of its position in the University, provides double opportunities for its students.

First, its comparative isolation on the old site of Trinity College, apart from the present Woman's College of Duke University, enables its students to maintain the traditional solidarity which close companionship and common interests make characteristic of the small, closely knit school.

Second, its ease of access to all of the facilities of the University enables its students through dormitory, fraternity, and social life to broaden their associations with students of other interests. It is only in the relatively large institution that students can be provided with a complete health service, well-rounded intercollegiate and intramural programs of competitive athletics for all students, and possibilities of membership in a large glee club, band, symphony orchestra, amateur dramatic group, or hobby club. All these advantages the University affords, in addition to its extensive program of visiting lecturers, concert artists, and art exhibitions.

In the smaller unit of the College of Engineering the student usually chooses to live in Southgate Dormitory with his fellow-engineers under the counselorship of a housemaster. An Engineers' Council, elected by the students, governs the house and arranges social events during the year. The engineers have their own assembly once each month in addition to regular class assemblies with undergraduates in other courses.

Dormitory spirit is unusually fine in Southgate. The building contains a large dining-hall in which excellent meals are served, a gymnasium, reading and recreation rooms, and meeting rooms for various societies and clubs.

Close by Southgate Dormitory and the other buildings of the College of Engineering there are available for student engineers a swimming pool, tennis courts, a track, and golf greens.

The well-equipped laboratories of the College in Asbury, Bivins, and Branson Halls serve as a testing ground for theories studied in the classroom. A further sense of the reality of theories and laboratory experiments is gained by the students in their regularly scheduled inspection trips to municipal and manufacturing plants in the vicinity where large-scale operations can be studied at first hand. The opportunities which the present-day industrial South holds for engineering graduates are amply illustrated for the students during these observational tours.

There are three student branches of national professional engineering groups at Duke—the American Society of Civil Engineers, American Institute of Electrical Engineers, and American Society of Mechanical Engineers. In addition, there is a local honorary engineering society, Delta Epsilon Sigma, for the recognition of scholastic proficiency and leadership. These groups combine their efforts each Spring to present exhibitions and demonstrations of the work carried on in Duke engineering courses at the popular and widely attended Engineers' Show. Such group co-operation brings the student into close association with other branches of his profession. The Engineers' Show also provides opportunities for the development of engineering laboratory projects by individuals under the guidance of engineering faculty groups.

The student who avails himself of the double opportunities afforded in the smaller engineering college and in the larger University group at Duke grows during four years into a well-trained and well-rounded individual, acceptable to the profession and sought after for positions in a wide range of fields.

Admission—How to Apply

Applications for admission to the College of Engineering should be addressed to the Secretary, Duke University, Durham, N. C.

BRANSON HALL



BIVINS HALL

For further information about the College of Engineering address:

W. H. HALL, Dean
College of Engineering
Duke University
Durham, N. C.

Bulletin of DUKE UNIVERSITY

(Illustrated)

COLLEGE OF ENGINEERING



ASBURY HALL

This folder presents general and pictorial information concerning the College of Engineering. More complete information is to be found in the Annual Bulletin of the College of Engineering.

DURHAM, NORTH CAROLINA

VOL. 12

MARCH, 1940

NUMBER 5-C

Published by Duke University monthly except in July, August, September, and December. Entered as Second Class Matter, March 25, 1929, at the Post Office at Durham, N. C., under Act of August 24, 1912.

VOLUME 12

March, 1940

NUMBER 5-D

BULLETIN OF DUKE UNIVERSITY

REPORT OF THE PRESIDENT
AND REPORTS OF OTHER OFFICERS

1938-1939



PUBLISHED BY THE UNIVERSITY
DURHAM, NORTH CAROLINA

BULLETIN
OF
DUKE UNIVERSITY

REPORT OF THE PRESIDENT
AND REPORTS OF OTHER OFFICERS

1938-1939



VOL. 12

MARCH, 1940

NO. 5-D

PUBLISHED BY DUKE UNIVERSITY MONTHLY EXCEPT IN JULY, AUGUST, SEPTEMBER, AND DECEMBER. ENTERED AS SECOND-CLASS MATTER MARCH 25, 1929, AT THE POST OFFICE OF DURHAM, NORTH CAROLINA, UNDER THE ACT OF AUGUST 24, 1912.

TABLE OF CONTENTS

	PAGE
REPORT OF THE PRESIDENT OF DUKE UNIVERSITY TO THE BOARD OF TRUSTEES.....	7
REPORTS OF UNIVERSITY OFFICERS:	
Trinity College.....	21
The Woman's College.....	68
The College of Engineering.....	80
The Graduate School of Arts and Sciences.....	84
The School of Religion.....	88
The School of Law.....	95
The School of Medicine.....	102
The School of Forestry.....	109
The Summer School.....	123
The University Libraries.....	133
The Duke Chapel.....	144
The Department of Physical Education and Athletics.....	146
The University Press.....	151
The University Council on Research.....	153
Publications by Faculty Members.....	155
The Department of Public Relations and Alumni Affairs.....	183
INDEX	189

REPORT OF THE PRESIDENT
OF DUKE UNIVERSITY

REPORT OF THE PRESIDENT OF DUKE UNIVERSITY

To the Trustees:

As President of the University, I herewith submit my report for the academic year 1938-39, along with reports of other officers of the University. These reports, constituting as they do another annual accounting of our stewardship, I commend to the attention of all the Trustees, but I especially commend the several reports to the attention of the appropriate committees of the Board. These reports taken together will give a picture of the year and its activities.

The officers of the University are able to report another year of progress. It is now nine years since the University was moved to this campus. In these nine years Trinity College has been much strengthened, the co-ordinate college for women has been established and has already taken its place among the good colleges for women in the United States, a small but excellent college of engineering has been organized. We have one of the first-rate medical schools of America, a law school with a faculty that is exceptionally able, one of the three graduate schools of forestry in the country, a divinity school that has made the University an outstanding center in this field of higher education.

These three colleges and four professional schools have all been approved by the several rating agencies. In 1938, the year following the complete set-up of the Graduate School of Arts and Sciences, this School and the University received the high recognition of admission to membership in the Association of American Universities, organized forty years ago, now having thirty other members in the United States including the oldest and most distinguished universities of the country, and two in Canada. All this has taken place within the brief period of nine years, for except in the case of Trinity College all the other divisions of the University have been organized, or in two cases made really effective, since the occupation of this campus in 1930. This is a record in which all of us find a good deal of satisfaction.

The Dean of the College of Engineering, the Dean of the Duke University Chapel, and the Director of the Department of Physical Education and Athletics have not before appeared in these reports. They will appear hereafter. Dean Hoover makes his first report for the Graduate School of Arts and Sciences.

As Dean Hall points out in his report, considerable progress has been made in engineering education at Duke, especially since the creation, in 1936-37, of a Division of Engineering, with a Chairman or Director of the Division and a Chairman for each of the three well-

organized Departments of Civil, Electrical, and Mechanical Engineering. Further progress will no doubt follow upon the change of the Division of Engineering, in the spring of 1939, into the College of Engineering with a Dean and full college organization. The College has a campus of its own with buildings and equipment adequate for the number of students the College will receive. It has its own dormitories, its own student organizations and activities, its own officers and teachers.

At the same time the engineering students feel themselves as members of the University community and, like the students of Trinity College and the Woman's College, have full membership in the University community with its manifold activities and life. It is an undergraduate college like Trinity College and the Woman's College. As I have pointed out before, the College of Engineering has one advantage over both of these in that it is smaller; and since this University seeks to operate in as small units as possible the College of Engineering may constitute an interesting experiment that might conceivably be followed in the future development of the University.

The College provides professional training but professional training that will be influenced by University ideals. The Dean and members of this college staff, like those of the other colleges, are members of the General University Faculty. It has also its own faculty and there is a Council on Engineering Instruction that consists of the Dean of the College of Engineering, the Secretary of the College, the Dean of the University, the Chairmen of the several departments in engineering, one representative to be appointed by the President of the University from each of the Departments of Mathematics, Physics, Chemistry, Economics, English. This Council deals with questions relating to instruction in engineering, the welfare of engineering students, and the cause of engineering in general.

All these improvements are significant, but more significant than the improvements themselves is the effect that the improvements in the plant and the set-up have had on the morale of the students, faculty, and alumni who are now active in their profession. From the standpoint of the University the setting up of engineering as a separate undergraduate group has distinct advantages. The teaching can be better done. It is, as I have said above, in line with the University's policy to carry on its educational operations in small units. It will not increase the number of students. The quota set by the University will be so adjusted that the total number of students to be admitted into the University in any one year will not be affected. It will not cost more to teach well students in the College of Engineering than it costs to teach well students in Trinity College. We have ob-

served that graduates in engineering have no difficulty in finding employment; and this is an important consideration. This is a problem that colleges must more and more face. It is a serious responsibility for a college to continue to send helpless graduates out into a world that sees no need for them.

Dean Hoover in his first report for the Graduate School of Arts and Sciences discusses some ways by which he thinks the quality of graduate education might be improved. For one thing, he suggests the selection of a larger proportion of very promising men who are just out of college instead of giving preference to students who have had a year or two of graduate studies either here or elsewhere. The Dean of the Graduate School makes this point well and it is a point that ought to be made.

He also makes the point that larger stipends might tend to attract abler students. It is always a question whether the number of graduate fellowships and scholarships should be reduced and their value increased in the expectation of decreasing the size of enrollment and raising the standard of the Graduate School. The Graduate School and the profession of college teaching ought to draw as able men as are drawn by the School of Medicine and the medical profession. There is an impression abroad that this is not always so and whatever tends to make it so should have the careful consideration of universities.

Considerations of this kind raise a large social question. If only the best men are to be admitted to graduate schools, medical schools, and on down the line, what is to become of the second best? It looks hard on the face of it. On the other hand, it will be good for young people when it is brought home to them that there is a place for them in the life of today if they will fit themselves for it. Unfortunately, too many people desire and sometimes demand the rewards of success without being willing to pay the price of success. Easy education and free education have helped, I fear, to create the feeling in too many young people, and older ones, that the world owes them a living. There ought to be institutions whose business it is constantly to remind a democratic society that excellence is rare and hard to attain, but that it can be attained and is worthy of whatever struggle and sacrifice may be necessary to attain it. It would seem that the graduate schools of arts and sciences in our universities ought above all else to stand for excellence and seek by every means to promote whatsoever things are excellent.

There have been changes in the organization of the Council on Graduate Instruction. The Council on Graduate Instruction, as now organized, consists of members of the Faculty above and including

the rank of associate professor who give at least half of their time to graduate work under the direction of the Graduate School, and others who may be appointed by the Governing Bodies of the University. One member is appointed from each of the professional schools which give courses for graduate credit, and in some cases more than one. The Council has to do with whatever pertains to instruction and requirements for degrees in the Graduate School of Arts and Sciences.

There is an Executive Committee of the Council consisting of the Dean and six members appointed by the President upon the recommendation of the Dean. Blanks are distributed once a year to each member of the Council with the request that six names be entered on the blank as his suggestions for members of the Committee. It is understood that the Dean is to take these suggestions into account in his recommendations to the President. In so far as possible the Humanities, Biological and Physical Sciences, Social Sciences, and other fields are to be represented on the Executive Committee. No more than four of the six committee members are to be reappointed for any ensuing year.

For the first time Dean Hickman reports for the Duke Chapel. He had served as one of the preachers to the University since the opening of the Chapel. In 1937-38 he was made Dean of the Chapel. The Dean gives a brief account of our interesting experiment in the organization and operation of the Duke University Interdenominational Church. Membership in the church is, of course, on affiliate basis and in no way affects the student's church membership. While the Duke Church is primarily intended for students whose residence in Durham is temporary, it welcomes into its affiliate membership permanent residents of the University community who are members of a denominational church. There is a dean, a director of united religious activities for each of the campuses, and an official board composed of student and faculty representatives. Students both on the West Campus, where the Chapel is located, and students of the Woman's College are, I think, showing an increased interest in the Chapel and the activities that center round it. The Sunday morning services are largely attended and the attendance at week-day morning prayers has shown a marked growth in the year under review. We therefore feel all the more sure that the University was right when it decided to put all religious services at Duke on a voluntary basis.

I have made special mention of these three officers who are reporting here for the first time. Further on I have some comments on intercollegiate athletics. The other reports are here to speak for themselves.

The Centennial Celebration April 21, 22, and 23, 1939, lived up to our fullest expectations. A great group of representatives of American colleges and universities and from foreign universities came to take part in our centennial occasion. In the course of the year that preceded the Celebration much was done through conferences, exhibits and other ways to bring the University and its workings to the attention of the public. I feel sure that our constituency has a clearer understanding of the meaning and mission of Duke University. The gifts were generous and amounted to a total of \$4,991,673.89.

The University still has needs, especially for scholarships, research funds, and increased endowment. This can be no secret for those who are informed about the needs of a university. They will understand that a university needs all the money it can get. Since the Centennial Celebration last April some nine hundred thousand dollars have been added to the B. N. Duke Endowment Fund and to the Angier B. Duke Loan and Scholarship Fund from the bequest of Mrs. Benjamin N. Duke, who died September 2, 1936. A large part of this generous and much appreciated bequest is to be added to the scholarship fund and will strengthen the resources of the University where resources are greatly needed. The bequest comes at the end of a long life singularly devoted to the institution and its causes.

Certain gifts to the University during the Centennial Year made possible the building of a large addition to the Duke Hospital. This addition was made in part with a view to developing a Department of Psychiatry and Mental Hygiene. Beginning in September, 1940, the University will operate such department. For this important undertaking the University will be well equipped through facilities made possible by the addition to the Hospital now nearing completion; through the great gift of the Highland Hospital in Asheville made last year by Dr. Robert S. Carroll; and through gifts of money which the University hopes to receive before this department begins to operate.

Since the beginning of the Duke University School of Medicine, in 1930, the need for a separate department for the study and care of mental diseases has each year become more and more urgent. It has seemed desirable, however, to postpone this major addition to the School until facilities could be provided which would meet the very specialized and exacting needs of mental patients, as regards both hospitalization and professional care. Dr. Carroll's highly significant gift will provide the essential requirements for the hospitalization of patients needing prolonged medical study and care. The problem at the Duke Hospital will be of another kind. Here a smaller hospital unit is required, which, together with an out-patient clinic will serve

the pressing needs of diagnosis and classification, as well as teaching and research.

As I have pointed out before, we have been accumulating funds through a good many years for the purpose of completing the Gymnasium. Work was begun on this building in April, 1939, and the building will be ready for a formal opening which will include a basketball game with Princeton University, on January 6, 1940. This will be an important addition to our equipment for physical education and athletics and will be useful in other ways also. If we can keep up the present rate of progress the University will soon have pretty complete equipment for athletic sports, intramural and intercollegiate. It is still true here, as it is true elsewhere, that most of the income for maintenance of athletics comes from football. With the new gymnasium, basketball might make a moderate yield if the people are willing to pay a reasonable admission fee.

In recent years there has been a growing interest in athletic games on the part of our public. We have, however, a relatively small stadium, we are not in a large center of population, and we do not charge large gate fees. For these reasons we need never expect large incomes from football such as some other universities receive. We are, therefore, not so conscious of the evils of gate receipts, as some other universities seem to be. If the public is willing to pay at the football turnstiles sufficient amounts to support not only the athletic but the physical education program, what better plan for this could be devised? Most of us would hesitate about undertaking to get together an endowment fund for athletics. Endowed universities need for other purposes all the endowment they can possibly get. Most of us would have equal hesitation about putting on students' bills amounts that in the aggregate would be sufficient to carry the program of physical education and athletics. Certainly in the South and in the West where the state universities charge low or no tuition, endowed universities find it almost impossible to raise tuition charges sufficiently to meet their most urgent educational needs. For us these two sources of athletic support seem, for the present at least, to be out of the question.

There are other problems, perhaps more serious ones, that arise from intercollegiate athletics as now carried on in the United States. These problems have their origin primarily in the great interest that the people of America have come to have in intercollegiate games, particularly intercollegiate football games. So far as the colleges I am most familiar with are concerned, the undergraduates do not have an excessive interest in intercollegiate games. The pressure comes from the alumni and the supporting public. Whatever the origin, with

the interest in intercollegiate games as intense as it is today, harsh rivalries and even bickerings are hard to avoid.

Colleges that provide forms of self-help for athletes as well as for other students may make mistakes in individual application of their principles; and even if they do not make mistakes they are liable, none the less, to misunderstandings and misjudgment. If the administration of admissions, scholarships, and self-help is kept in the hands of committees that serve alike all students, athletic or others, and if all funds used for these purposes are administered by the college itself, then it is in control and can change its procedures whenever in its opinion they should be changed.

I am aware that differences of opinion may be possible, but my own opinion is that athletics at Duke are on a sound and wholesome basis and not injurious to the University, that they contribute greatly to the physical well-being and pleasure of the students, and that the whole athletic program, both intercollegiate and intramural, is conducted in full co-operation with the University's educational purposes. This is not only my opinion, but I think it represents the opinion of those who are most familiar with conditions and have the best right to have an opinion on this particular question.

I did not always feel this way about intercollegiate football. In the nineties athletic conditions hereabouts were very bad. Trinity College, about which Duke University is built, decided in 1895 to abolish football. Beginning in 1895-96 football was under ban for twenty-five years. In the years immediately following the World War strenuous games were popular. Boxing and wrestling were given places in the intercollegiate athletic program. A renewed and vigorous effort was made to reinstate football at Trinity. With much searching of heart the Faculty at a meeting January 31, 1920, decided to grant the request of students and alumni and authorize the re-establishment of football as an intercollegiate sport. The actual bringing of the game back on this campus was a slow and rather long process, and it has now been for only some ten years that we have had football teams that could compete on more or less even footing with rival teams.

It may well be that I occupy a somewhat unique relation to the question of intercollegiate football. I have known intimately a college that went for twenty-five years without football. I have known intimately the same college through ten years of more or less ill-organized intercollegiate football, and then through a ten-year period of well-organized football. Throughout the twenty-five years football was under ban at Trinity there was a strong and constantly growing dissatisfaction on the part of students and younger alumni. Toward

the end of that period the dissatisfaction became very great. As I look back now I feel sure that the progress of the College on the whole was hindered rather than helped by the long continued prohibition against football. We had to spend too much time in defending our position and perhaps in explaining how we were better than other people. The morale is better now than it was then. Instead of the sense of repression and sometimes of resentment there is a widespread feeling of co-operation with the students and alumni, and with our supporting public. As everybody knows, it is easier to teach and to guide students where there is a spirit of co-operation and a sense of satisfaction.

At Duke, then, we are reasonably well satisfied with our athletic conditions. We fully recognize that any college today with good athletic teams is "suspect" and that any college with good teams must be a thoroughly first-rate college or be in open disgrace in certain circles. At this point, as at some other points, the Southern States have a difficult task to work out. In the Northeast, for example, colleges are endowed or are parts of endowed universities. They have much the same requirements for admission, charge much the same tuition fees, and pursue in general the same educational ideals. It is easy, therefore, for them to have common agreements about athletics that can be maintained without much chance of serious misunderstandings and friction. In the Big Ten, to take another example, colleges are nearly all parts of state-maintained universities. They are different from those of the Northeast yet they have comparable educational requirements and standards; and therefore have no inherent difficulties in reaching agreements about intercollegiate athletics. In the South, on the other hand, there are endowed colleges and universities and state supported, and wide variations in tuition charges, admission requirements, and educational standards.

To have both kinds of colleges strong in the same section of the country is wholesome and in keeping with the American tradition. If we will in this respect forget what is going on in other parts of the country and find a way to come together in a league of colleges, the endowed and the publicly supported, with a more or less common tuition charge at least for out-of-state students, and more or less common educational requirements and standards, then we could manage intercollegiate athletics better and in other ways make our appropriate educational contribution not only to our region but also to America. I think I fully realize how difficult this task will be, but in my best moments I almost dare to hope that we may have the vision and the courage to achieve a result that would seem to be so desirable and

that might mean so much as a large-scale experiment in American education.

To those not familiar with the actual facts it might seem that Duke is overbuilt. While the University has many needs, as a matter of fact I hear more often about building needs than about any other one thing. Completion of the Library is beyond question a sore need today, and growing more acute not only in the General Library but also in the Law Library. The growth of the School of Forestry has brought about a crowded condition in the Biology Building and that now greatly needs enlargement. A great extension of the dining rooms in the Union has left the Union inadequately equipped for the purposes that the Union was really built to serve. Further alterations ought to be made. These would not be expensive and should be undertaken before too long, maybe next summer.

An additional Nurses Home is at present a very sore need. The doctors at the Hospital are accumulating money towards that building and I hope that ways may be found before too long to put it up.

Dean Wannamaker, in his report for Trinity College, raises again the question whether there should not be some reduction in the number of courses required for undergraduates and more concentration and prolonged application in the reduced number of courses of study that is required. I believe that this would be an improvement and I hope the question will receive the careful attention of the Faculty Council and of the General Faculty.

The question of required attendance and permissible "cuts" for undergraduates is again under discussion. We are making cautious experiments and some of us at least would like to hope that the time might come when class attendance records would not be kept. This change is not being considered on the theory that class attendance would be diminished but rather in the hope that with the responsibility definitely placed upon the student he would be more serious in his approach to educational opportunities that the college provides for him. The practice has been to require attendance but to give a rather liberal quota of permissible "cuts." I have become convinced that this whole idea is wrong.

The first step in reform at this point would be to get rid of "cut," both the word and the idea. In afterlife the students will not have to respond to a roll call when they go to offices and business places of other kinds. That will not mean, however, that they may take a certain number of "cuts." It does mean that the responsibility is theirs and if they are to succeed there they must understand their opportunities and their obligations. For this sort of attitude in later life the college should be preparing its students. Then, too, if this re-

quired attendance were lifted it might tend to make each teacher feel that he is obliged to make every class hour seem worth while to his students.

The whole question of college teaching is still much to the fore here. A great deal of attention is being given to it and every means that we know is being used to bring about improvements in the quality of college teaching. Every university has difficulties when it seeks to procure excellent teaching for its undergraduates and at the same time maintain its graduate and professional education at a high level. I am more and more convinced that a certain proportion of teachers should be selected for their personality and teaching power, while some should be chosen for their own productive scholarship and ability to stimulate and guide their students in the direction of scientific research and scholarship.

Men of the first type must be primarily interested in the student, those of the second type in the subject. I think of these two types of men as being both alike creative, one through students he inspires and the other primarily through his own work. Men of the first type are needed in the teaching of freshmen and sophomores, and of upper-classmen who are seeking through their college education to become cultivated men rather than specialized students of whatever kind. Men of the second type for the most part ought to have work for juniors and seniors who are already on their way to specialized careers, and for graduate students who are engaged in definite lines of scholarship. There are still other teachers that belong in both of these groups. I should like to see the number of these increased, but it seems rather difficult for most men to be equally interested in the student and the subject.

Trinity College was taken over and dedicated to the purposes of Duke University, and we are under the highest commitment to keep the College at the center of the University strong and growing. We cannot allow the University to choke the College to death. While we are making every possible effort to keep the College where it belongs, we are at the same time doing all we can to develop the graduate and professional schools. No vital university can be content merely with teaching what is in textbooks. Through its teachers and the students that go out from it, it must make its contributions to the common fund of constantly growing knowledge upon which in part at least the progress of civilization depends. This calls for scholars, scientists, libraries, laboratories, and research funds. Accompanying reports, particularly reports for the Council on Research, for the Duke University Libraries, for the Graduate School, for the School of

Medicine, and for the School of Forestry, will give some idea as to what is being done here.

All the time there is need for additional facilities and research funds. Fortunately, gifts are constantly coming in. For example, 26 per cent of the expenditures of the General Library were derived from sources other than University appropriations. These gifts to the Library show steady increase. In the year under review the Medical School received for research purposes of one kind or another gifts in money from many sources totaling \$129,147. The Medical School has also received chemicals and materials of many kinds from sources all over the country. The Hospital received last year contributions from cities, counties, charities, etc. amounting to \$63,333. The laboratories of the College of Engineering and of the physical and natural sciences have also received many gifts.

Endowed universities may have, certainly in the years just ahead of us will have, increasing difficulties in securing large gifts. It is, therefore, especially encouraging to us here at Duke to see an ever-growing stream of smaller gifts. To this there ought to be no end. When this is rightly understood it puts the support of a university on a level where almost everybody in one way or another can help.

William McDougall, Professor of Psychology, distinguished thinker and writer, died November 28, 1938. A memorial service for him was held April 7, 1939, attended by representatives of colleges and universities from almost every part of the country. The causes he contended for were not popular in his day and have not yet fully won their way. He was a great man, a great personality, and his death is a serious loss to the University and its prestige. Professor McDougall, with a world-wide reputation, came to the University at its very beginning. He has meant more to the University and to me than I could possibly set down here in words. I am grateful beyond my powers of expression to him and to the many others like him who have made possible the rapid development of Duke University as a seat of learning. Great men make great universities.

W. P. FEW,
President.

REPORTS OF UNIVERSITY OFFICERS

TRINITY COLLEGE

To the President of the University:

The reports of Deans Greene, Herring, and Manchester give a fair picture of the academic year under review. They reveal that while we have much more to achieve before we can feel that the undergraduate college is even nearly what we yearn to see it become, we have reason to believe real progress towards the ideal is being made. From my years of active sharing in the work in several capacities, I know that Trinity College is a far better place in which youth may live and learn than it was some years ago. I know that more thought is given to the whole problem, that our efforts are more constantly and more intelligently directed, that our teaching is better done on the whole, that our students are in general better prepared to enter into our program and, in spite of superficial criticism of youth of today by cynically minded persons with a gift for words, are actuated by laudable ambition to "realize their personalities" through mental and moral processes.

But it is in my opinion still true with us as elsewhere that it is made, in a sense, inviting to students to "scatter" their efforts and in the end mistake shallowness of breadth for depth of concentration. Even though we see this mistake all too often, I believe it does not hold for the majority. To reduce this all too common error in education, I advise again a reduction in the quantity of hours required for graduation with the resultant far more thorough knowledge through intense study under a reduced schedule. I am convinced that especially in the two upper years students should be held to not more than twelve hours of classwork a week and that much more time in the preparation of the work should be required. And students should by no means, even the brighter ones, be allowed to carry more with the thought of shortening their stay in college. Instructors, to be sure, must adjust assignments and requirements to the intensified work; but they must also be prepared and willing to contribute more in the way of guiding and inspiring. There is no place on a college faculty for a dull, uninspiring teacher or for one who is too busy with other projects to keep thoroughly in sympathetic intellectual companionship with youth eager to learn.

We are already considering this problem of the wisest "study load" for both students and teachers and I hope we can agree on what I believe will be an improvement. It might, I think, appear wise to increase the length of the lectures and recitations with the reducing of the number of such periods the upperclassmen would have under the plan suggested above. If that should be done, the teacher would have to be all the more alive and informed. "Sogginess" would be all the more criminal.

Several years ago I suggested the advisability of having artists and writers spend each year several weeks on our campus and be available to our students for personal interviews and contacts. We have done something in this way and are happily looking forward next year to a

two weeks' visit by the distinguished musician and composer, Harold Morris, formerly of the Julliard School of Music and now of Columbia University. He will spend two weeks here, one in October and one in March, and will give lectures and concerts each evening. He will reside on the campus and endeavor to be of use to our students. Lovers of music and students of it both of the University and neighboring cities and colleges will be welcomed to this very interesting undertaking. We hope to have here next a gifted poet and writer, one who is eager to be of help to young would-be writers.

It seems to me not out of place to speak briefly of what strikes me as a characteristic of universality of our institution. Here come from all parts of our country young men and young women who are true types of American youth and representatives of the best American homes. They are taught by teachers who come from all parts of our country and from other lands, and who have been trained in colleges and universities in various parts of the world. There is nothing narrow or sectional here; true worth determines the place both students and teachers attain in our university life. And the beautiful Chapel stands as a symbol of the eternal verities in our human striving for knowledge and wisdom. Its beauty and tranquillity invite to contemplation and induce a serenity of spirit in all who visit it. In it many of our former students and even many who have never attended the University enter into holy wedlock. On our grounds is the great University Hospital where thousands seek relief from physical suffering, where many are cured and some die, and where little babies are born, later probably to come as hopeful youths to our colleges. And in our auditoriums we have great musical concerts by world-famous artists, lectures by visiting scholars and writers who add their share to the contributions that our teachers and the thousands of books in the University libraries make toward the education of youth. And there are the playing fields and the gymnasiums where youth may seek physical development in pleasurable sports and contests and learn by play how to live with other human beings. And almost as a crowning glory of it all, there are our thousands of acres of glorious woodland beginning right at our doors and calling at all times to all who have in their souls a love of trees and great forests where brood mystery and solitude and peace.

Truly, I cannot see how a normal man or woman can live here in any capacity and not feel himself growing better fitted to become in a real sense a citizen of the world.

WILLIAM H. WANNAMAKER,

Dean.

UNDERGRADUATE INSTRUCTION

In the *Bulletin of Undergraduate Instruction* for the scholastic year 1938-39 (counting each year course as two semester courses) we find that fifty-five courses are offered primarily for Freshmen; eighty-two courses, primarily for Sophomores; two hundred and seventy-one courses primarily for Juniors and Seniors; and three hundred and fifty-eight courses for Seniors and Graduates. All courses open primarily to Fresh-

men and Sophomores, with rare exceptions, have multiple sections—in some cases as many as thirty-four sections in a single course. Excluding all sections except one for each course, we see that the undergraduate student has a wealth of opportunity from which to make the normal selection of forty semester courses required for the degree. Upon him and his advisers rests the responsibility of choosing his program of work from an offering of seven hundred and sixty-six courses open to undergraduates. At best he can choose only approximately one twentieth of these courses for study. Not all the seven hundred and sixty-six courses are offered each year, but there are very few courses that are offered and yet not given at least in alternate years.

There is urgent need in the undergraduate colleges of an adequate advisory system whereby each individual student may be given wise guidance in planning a unified program of work for the four college years.

In the next place, the continued and continuous multiplying of offerings from year to year may militate against the effort to establish a properly correlated program of curricula offerings for undergraduate students. The following observation made by the Dean of the University in his report for the year 1937-38 has today the same forceful significance it had a year ago: "I do, though, look with misgiving on the multiplying of offerings in the various departments of instruction. I believe a goodly number of such courses for undergraduates might well be omitted with a resulting concentration on the main body of truth to be learned from the main subject."

Finally, the distribution of courses, as set forth in the opening paragraph, should be studied and revised in the light of present-day graduate and undergraduate needs.

In the year 1938-39 there were two hundred and thirteen members of the Instructional Staff, exclusive of assistants, giving instruction, in whole or in part, to 2,576 undergraduate students.

REVISION OF THE CURRICULUM

The Special Committee, appointed by the President in 1937-38 to make a study of the regulations governing the administration of the curriculum, submitted in February, 1939, its report to the Committee on Educational Research. This Committee held several meetings during the spring semester of 1938-39 for consideration of the recommendations of the Special Committee. The Chairman of the Committee on Educational Research was requested to prepare a report for final consideration and revision or approval by the Committee. This report was prepared and submitted as requested. Many factors are involved in the problem of revising the regulations governing the administration of the curriculum. The proper adjustment of these factors in a revised curriculum necessitates slow and careful procedure. Therefore the final report of the Committee to the President, the Dean, and the General Faculty Council of the University will probably not be presented before the fall semester of the year 1940-41.

DISTRIBUTION OF STUDENTS BY DEPARTMENTS

In Table 1 is given the enrollment of students in the various departments for the year 1938-39.

TABLE 1
DISTRIBUTIONS OF STUDENTS BY DEPARTMENTS
YEAR 1938-39

Department	The Two Colleges			
	Without Duplicates		With Duplicates	
	Fall Semester	Spring Semester	Fall Semester	Spring Semester
Botany.....	203	207	222	230
Chemistry.....	611	524	709	590
Economics and Business Administration..	1,076	920	1,972	1,723
Education.....	362	428	420	494
Engineering (Civil).....	48	34	92	79
Engineering (Electrical).....	58	52	135	118
Engineering (Mechanical).....	182	152	333	331
English.....	1,663	1,491	2,026	1,846
Fine Arts.....	162	163	178	179
Forestry.....	10	21	28	34
Geology.....	72	56	73	60
German.....	575	501	591	513
Greek.....	126	113	133	123
History.....	1,071	937	1,238	1,374
Latin.....	27	43	49	62
Mathematics.....	650	539	677	564
Music.....	53	46	58	69
Philosophy.....	219	259	255	296
Physical Education (Men).....	1,040	969	1,040	969
Physical Education (Women).....	764	710	812	723
Physics.....	464	406	508	446
Political Science.....	550	556	583	590
Psychology.....	225	151	247	181
Religion.....	694	756	724	837
Romance Languages.....	1,262	1,091	1,356	1,160
French.....	815	734	897	793
Italian.....	10	11	10	12
Spanish.....	437	345	449	356
Sociology.....	194	201	270	285
Zoology.....	482	402	557	470

DISTRIBUTION OF STUDENTS BY GROUPS

In Table 2 (A and B) is given the distribution of students by groups leading to the A.B. and B.S. degrees.

TABLE 2

A

DISTRIBUTION BY GROUPS—TRINITY COLLEGE
YEAR 1938-39

General (Bachelor of Arts).....	508
Business Administration	358
Pre-Medical	318
Engineering	207
Pre-Legal	172
Teaching	48
General (Bachelor of Science).....	29
Honors	25
Pre-Forestry	11
Academic-Law	10
Religion	11
Special	13
<i>Total</i>	<u>1,710</u>

TABLE 2

B

DISTRIBUTION BY GROUPS—THE WOMAN'S COLLEGE
YEAR 1938-39

General (Bachelor of Arts).....	743
Public School Teaching.....	59
Social Service	14
Pre-Legal or Academic-Law.....	12
Honors	11
Business Administration	9
General (Bachelor of Science).....	8
Pre-Medical	7
Religion	2
College Teaching	1
<i>Total</i>	<u>866</u>

GENERAL HONORS

Students of the Freshman, Sophomore, and Junior classes who earn a credit of thirty semester hours and an average of at least two and one-half quality-points per semester hour are given Honors for the year. Students at graduation who have earned an average of at least two and one-half quality-points per semester hour are recommended for a degree *magna cum laude*. Students at graduation who have earned an average of at least two and three-fourths quality-points per semester hour are recommended for a degree *summa cum laude*.

Table 3 gives the distribution of students winning General Honors in the two Colleges.

TABLE 3

FRESHMAN HONORS

Trinity College	16	The Woman's College.....	10
-----------------------	----	--------------------------	----

SOPHOMORE HONORS

Trinity College	13	The Woman's College.....	6
-----------------------	----	--------------------------	---

JUNIOR HONORS

Trinity College	12	The Woman's College.....	8
-----------------------	----	--------------------------	---

SENIOR HONORS

<i>Magna Cum Laude</i>		<i>Summa Cum Laude</i>	
Trinity College	8	Trinity College	1
The Woman's College.....	5	The Woman's College.....	2

DEPARTMENTAL HONORS

At the graduating exercises of the 1939 Commencement, Honors in Chemistry were awarded to two students; in Greek, to one; in History, to one; and in Mathematics, to two.

Table 4 gives the distribution of students reading for Honors in the various departments.

TABLE 4

DEPARTMENTAL HONORS STUDENTS
YEAR 1938-39

<i>Department</i>	<i>Seniors</i>	<i>Juniors</i>	<i>Total</i>
Chemistry.....	2	2	4
Economics.....	4	5	9
English.....	5	9	14
Greek.....	2	..	2
History.....	1	..	1
Mathematics.....	2	1	3
Philosophy.....	1	..	1
Zoology.....	..	1	1
<i>Total</i>	17	18	35

DIVISIONAL HONORS

In 1938-39, Honors within the Division of Humanities were available to qualified students in one group: English (major subject), fine arts, and philosophy. Four seniors graduated in this correlated group program.

Honors likewise in the Division of Social Sciences were available in one group: economics (major subject), political science (major subject), and philosophy. Four Seniors graduated in this correlated group program.

THE DEAN'S LIST

In Table 5 is given a comparative statement of the Dean's List for 1937-38 and 1938-39.

TABLE 5

THE DEAN'S LIST

YEAR 1937-38

Fall, 1937	196
Men	102
Juniors	45
Seniors	57
Women	94
Juniors	43
Seniors	51
Spring, 1938	307
Men	162
Sophomores	37
Juniors	52
Seniors	73
Women	145
Sophomores	35
Juniors	48
Seniors	62
<i>Total for Year</i>	503

YEAR 1938-39

Fall, 1938	181
Men	96
Juniors	38
Seniors	58
Women	85
Juniors	32
Seniors	53
Spring, 1939	295
Men	142
Sophomores	54
Juniors	39
Seniors	49
Women	153
Sophomores	41
Juniors	42
Seniors	70
<i>Total for the Year</i>	476

INSTRUCTION IN 1938-39

I am giving in Table 6 (A and B) the list of courses in each department, together with the instructor or instructors in each course, that were given during the year 1938-39. With each course is given also a statement of the number and classification of the students enrolled. The abbreviations used are as follows: Gr., Graduate; Sr., Senior; Jr., Junior; Soph., Sophomore; Fr., Freshman; Adv. Fr., Advanced Freshman; Sp., Special.

TABLE 6

A
CORRELATION OF COURSES IN DUKE UNIVERSITY
FALL SEMESTER, 1938-39
DEPARTMENT OF BOTANY

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Addoms, Anderson, Miss Boomhour, Kramer, Oosting, Perry.....	132	4	17	4	.....	.....	.....	157
2	Anderson.....	.....	7	5	.....	.....	.....	.....	12
51	Addoms, Ruth.....	.....	1	.....	1	1	.....	.....	3
55	Oosting.....	.....	.....	2	2	1	.....	.....	5
101	Perry.....	.....	.....	3	1	1	.....	1	6
103	Wolf.....	.....	.....	1	4	7	.....	1	13
151	Kramer.....	.....	.....	1	2	.....	.....	.....	3
203	Anderson.....	.....	.....	.....	.....	.....	2	.....	2
225	Anderson, Kramer, Oosting.....	.....	.....	.....	.....	.....	4	.....	4
255	Blomquist.....	.....	.....	.....	.....	.....	3	.....	3
305	Oosting.....	.....	.....	.....	.....	.....	5	.....	5
359	Blomquist.....	.....	.....	.....	.....	.....	1	.....	1
397	Blomquist, Addoms, Anderson, Kramer, Oosting, Perry, Wolf.....	.....	.....	.....	.....	.....	8	.....	8
<i>Total</i>	.....	132	12	29	14	10	23	2	222

DEPARTMENT OF CHEMISTRY

1	Miss Brown, Hill, Hobbs, Saylor, Vermillion, Wilson.....	301	8	13	6	1	.....	1	330
61	Hobbs, Saylor, Vermillion, Vosburgh.....	15	16	107	9	1	.....	1	149
151	Bigelow, Miss Brown, Hauser.....	.....	.....	14	41	8	1	.....	64
153	Miss Brown, Hauser.....	.....	.....	1	4	2	.....	.....	7
173	Vosburgh.....	.....	.....	.....	5	4	.....	.....	9
215	Hill, Vosburgh.....	.....	.....	.....	.....	1	19	.....	20
241	Wilson.....	.....	.....	.....	7	13	2	1	23
253	Bigelow, Miss Brown.....	.....	.....	.....	.....	2	7	.....	9
261	Gross, Hobbs, Saylor.....	.....	.....	.....	3	18	7	.....	28
273	Gross.....	.....	.....	.....	.....	.....	19	.....	19
275	Gross, Bigelow, Miss Brown, Hauser, Hill, Hobbs, Saylor, Vosburgh.....	.....	.....	.....	.....	8	21	1	30
303	Gross.....	.....	.....	.....	.....	.....	16	.....	16
365	London.....	.....	.....	.....	.....	.....	5	.....	5
<i>Total</i>	.....	316	24	135	75	58	97	4	709

DEPARTMENT OF ECONOMICS AND BUSINESS ADMINISTRATION

11	Burt, Lemert.....	90	.....	.....	.....	.....	.....	.....	90
51	Berry, Burt, Delaplane, Eiteman, Landon, Oliver, Smith, Spengler.....	.....	113	319	54	6	.....	3	495
57	Black, deVyver, Havens, Keech, Shields.....	.....	66	160	18	18	.....	2	264
103	Landon.....	.....	1	10	21	3	2	.....	37
105	Keech.....	.....	4	16	40	16	1	.....	77
107	Lamert.....	.....	1	2	6	2	.....	.....	11

DEPARTMENT OF ECONOMICS AND BUSINESS ADMINISTRATION (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
115	Lemert.....			1	8	7		1	17
138	Berry, Welfing	1	8	20	1				30
143	Eiteman, Oliver, Smith.....	8	34	125	6	2			175
169	Smith.....		4	13	20				37
171	Shields.....	5	8	53	5				71
173	Black.....		1	2	21				24
177	Shields.....		7	22					29
181	Springer.....	1	5	46	105	2			159
187	Welfing		1	13	7				21
203	Glasson, Delaplane, Welfing.....		5	33	105	2			145
215	Hoover.....		4	13	10				27
217	Spengler.....			8	18	2			28
231	Hamilton.....			2	17	3			22
237	Springer.....			4	8	8			20
239	Hamilton.....			2	13	6			21
241	Spengler.....				6	12			18
245	von Beckerath.....			2	7	1			10
253	deVyver.....			3	16	41	1		61
265	von Beckerath.....			6	14	2			22
275	Black.....			3	23	3			29
311	Hamilton.....					9			9
313	Hoover.....					5			5
318	Hoover.....					11			11
Honors	deVyver.....				7				7
<i>Total</i>		90	200	577	513	504	82	6	1,972

DEPARTMENT OF EDUCATION

1	Watson.....	95	2						97
8	Childs, Easley, Eicher.....	55	22	28					105
58	Easley.....		3	7	6	3			19
83	Proctor.....		5	15	6	5		1	32
101	Carr.....			1	2	13			16
103	Proctor.....		4	7	17	4		1	33
105	Childs.....			2	3	6			11
115	Childs.....			1	28				29
131	Carr.....				1	13			14
142	Carr.....		1	1	10	6			18
212	Car.....						3		3
217	Easley.....				1	1	1		3
227	Easley.....				1	2	5		8
233	Proctor.....					4	4		8
254	Proctor.....				2	4	1		7
294	Carr.....					5	3		8
307	Brownell.....						7		7
309	Brownell.....						2		2
<i>Total</i>		150	37	61	50	94	26	2	420

DEPARTMENT OF CIVIL ENGINEERING

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
11	Williams.....	.....	5	6	.....	.....	.....	.....	11
15	Williams.....	.....	5	4	.....	1	.....	.....	10
107	Bird, Williams.....	.....	4	8	15	.....	.....	.....	27
108	Hall, Williams.....	.....	.....	1	5	2	.....	.....	8
113	Williams.....	.....	.....	4	1	.....	.....	.....	5
119	Bird.....	.....	.....	.....	.....	7	.....	.....	7
123	Hall.....	.....	.....	.....	.....	7	.....	.....	7
131	Bird.....	.....	.....	2	1	.....	.....	.....	3
133	Bird.....	.....	.....	.....	.....	7	.....	.....	7
143	Bird, Hall.....	.....	.....	.....	.....	7	.....	.....	7
<i>Total</i>	.....	.....	14	25	22	31	.....	.....	92

DEPARTMENT OF ELECTRICAL ENGINEERING

7	Meier.....	.....	4	17	1	.....	.....	.....	22
51	Meier.....	.....	4	17	1	.....	.....	.....	22
151	Ranson.....	.....	.....	1	5	2	.....	.....	8
153	Ranson.....	.....	3	5	12	.....	.....	.....	20
155	Meier.....	.....	.....	.....	3	5	.....	.....	8
159	Seeley.....	.....	.....	.....	3	5	.....	.....	8
161	Seeley, Ranson.....	.....	.....	1	5	2	.....	.....	8
163	Meier.....	.....	.....	.....	3	5	.....	.....	8
165	Seeley, Meier, Ranson.....	.....	.....	.....	3	5	.....	.....	8
257	Meier.....	.....	.....	.....	3	5	.....	.....	8
261	Seeley.....	.....	.....	.....	3	5	.....	.....	8
263	Seeley.....	.....	.....	.....	.....	5	.....	.....	5
265	Seeley.....	.....	.....	.....	.....	2	.....	.....	2
<i>Total</i>	.....	.....	11	41	42	41	.....	.....	135

DEPARTMENT OF MECHANICAL ENGINEERING

1	Pigage.....	81	.....	6	1	1	.....	1	90
7	Chapman, Pigage.....	.....	13	32	.....	1	.....	.....	46
79	Chapman, Pigage.....	.....	6	20	.....	.....	.....	.....	26
85	Chapman.....	.....	1	15	1	.....	.....	.....	17
107	Reed.....	.....	4	4	10	1	.....	.....	19
171	Reed.....	.....	.....	2	.....	10	.....	.....	12
173	Wilbur.....	.....	.....	2	.....	10	.....	.....	12
181	Reed.....	.....	.....	1	5	2	.....	.....	8
185	Chapman.....	.....	2	5	9	.....	.....	.....	16
187	Wilbur.....	.....	5	4	11	.....	.....	.....	20
189	Chapman.....	.....	6	5	11	.....	.....	.....	22
191	Wilbur.....	.....	.....	2	.....	10	.....	.....	12
193	Reed.....	.....	.....	2	.....	10	.....	.....	12
195	Reed.....	.....	.....	2	.....	11	.....	.....	13
199	Wilbur.....	.....	.....	1	5	2	.....	.....	8
<i>Total</i>	.....	81	37	103	53	58	.....	1	333

DEPARTMENT OF ENGLISH

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
A1	Patton.....	17							17
1	Allen, Blackburn, Carpenter, Fitzgerald, Harwell, Irving, Johnson, Martin, Miss Poteat, Sanders, Stroven, Sugden, Mrs. Vance, Mrs. White.....	651	32	2				2	687
E1	Fitzgerald, Harwell.....	52							52
2	Johnson, Ward.....	28	5	1					34
53	Jordan.....	1	55	41	3	1		1	102
55	Blackburn, Irving, Patton, Sanders, Sugden, Mrs. Vance, Ward.....	2	46	204	16	3			271
63	Mitchell.....	4	22	2	1				29
65	Sanders.....	3	2	7					12
101	Mitchell.....		1	7	3	2			13
103	Blackburn.....			10		1			11
106	West.....			1		1			2
107	Sugden.....			5	7	4			16
119	West.....			7	16	19			42
121	West.....		2	3	2			1	8
123	Brown.....		1	7	11	22			41
125	Patton, White.....			6	17	17			40
127	Greene.....			5	6	14			25
129	Mitchell, Mrs. Vance.....		1	11	23	18			53
133	White.....			1	1	1		1	4
137	Gohdes, Hubbell.....			16	46	31			93
139	West.....			4	5	11			20
143	Greene.....		1	2	2	2			7
149	Ward.....			1	2	1			4
151	Herring, Lewis.....		6	42	76	33			157
155	Mrs. White.....			10	39	38			87
201	Brown.....						5		5
203	Baum.....					4	11		15
213	Brown.....					5	1		6
215	Gilbert.....					4	8		12
217	Gilbert.....					1	3		4
218	Gilbert.....						5		5
219	Irving.....				1	7	11		19
229	Hubbell.....					5	9		14
230	Hubbell.....					2	10		12
233	Gohdes.....				1	11	13		25
349	Baum, Gohdes, White.....						27		27
Remedial	Fitzgerald, Harwell.....	41							41
Honors	Blackburn, Irving, Ward.....				9	5			14
<i>Total</i>		767	179	419	289	264	103	5	2,026

DEPARTMENT OF FINE ARTS

1	McDonald.....	32						1	33
51	Miss Hall.....		5	50	10	13			78
52	McDonald.....		1		1	2			4
53	Miss Hamlin.....			7	5	1			13
93	Miss Hamlin.....		1	3	8	8			20

DEPARTMENT OF FINE ARTS (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
103	Miss Hall.....				4	4			8
107	Miss Hamlin.....			8	8	1			17
Honors	McDonald.....					5			5
<i>Total</i>		32	7	68	36	34		1	178

DEPARTMENT OF FORESTRY

211	Wackerman.....			1	1	2			4
251	Schumacher.....					2	2		4
253	Harrar.....						1		1
257	Schumacher.....						2		2
259	Harrar.....					1			1
261	Coile.....					2	2		4
273	Thomson.....				1	1			2
277	Thomson.....					2			2
357	Korstian, Coile, Harrar, Thomson.....						6		6
Theses	Korstian, Harrar.....						2		2
<i>Total</i>				1	2	10	15		28*

*Exclusive of students in the School of Forestry.

DEPARTMENT OF GEOLOGY

51	Berry.....		13	32	14	7			66
101	Berry.....				3	3			6
151	Berry.....					1			1
<i>Total</i>			13	32	17	11			73

DEPARTMENT OF GERMAN

1	Krummel, Maxwell, Shears, Wilson, Young.....	150	15	36	6			1	208
3	Krummel, Maxwell, Shears, Wilson, Young.....	27	23	108	18	2		3	181
51	Vollmer.....	3	1	13	1				18
101	Maxwell.....			1	8	3	2	1	15
103	Wilson.....				6	6			12
107	Maxwell, Wannamaker.....	1	1	26	39	10			77
109	Krummel.....	1	1	2	8				12
113	Wilson.....				5	3			8
117	Vollmer.....				3	5	2		10
121	Vollmer.....			1	7	1			9
123	Shears.....			4	13	6			23
209	Krummel.....				3	3			6
211	Vollmer.....				4	6	2		12
<i>Total</i>		182	41	191	121	45	6	5	591

DEPARTMENT OF GREEK

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Truesdale.....	4	2		2		1		9
53	Truesdale.....	1		1			1		3
105	Peppler.....			1	1	1	1		4
107	Truesdale.....					4			4
115	Truesdale.....					3	2		5
117	Peppler.....					2	3		5
121	Peppler.....			5	23	43			71
131	Way.....			2	1	6			9
141	Way.....			2	5	5			12
209	Way.....						3		3
245	Way.....					1	3		4
307	Peppler.....						2		2
Honors	Peppler.....					2			2
<i>Total</i>		5	2	11	32	67	16		133

DEPARTMENT OF HISTORY

1	Miss Chaffin, LaFargue, Manchester, McCloy, Nelson, Mrs. Quynn, Ropp...	318							318
2	Hamilton.....	39							39
51	Miss Baldwin, Mabry, Robert.....		24	59	22	6		1	112
52	Munyan.....		23	37	14	5			79
65	McCloy.....		20	31	3	2			56
91	Mabry, Robert, Still.....		40	109	40	18			207
101	Mrs. Quynn.....			3	10	4			17
105	Hamilton.....		1	9	45	7			62
107	Munyan.....		1	6	8	7			22
109	Nelson.....			1	2	4			7
113	Woody.....		2	9	4	5			20
123	Laprade.....			6	28	26			60
127	Lanning.....			9	19	7			35
135	Carroll.....		1	4	9	10			24
141	LaFargue.....		1	4	6	6			17
153	Sydnor.....			4	5	7		1	17
209	Still.....				4	11	2		17
211	Manchester.....				2	12	1		15
217	Carroll.....				2	7	11		20
223	Mrs. Quynn.....					2	1		3
225	Nelson.....					2	2		4
231	Lanning.....				3	14	4		21
242	LaFargue.....				1	13	2		16
305	Laprade.....						6		6
307	Woody.....						3		3
315	Sydnor.....						16		16
317	Carroll.....						1		1
321	Lanning.....						1		1
325	Laprade.....						6		6
337	Sydnor.....						15		15
Honors	Laprade, Sydnor.....					2			2
<i>Total</i>		357	113	291	227	177	71	2	1,238

DEPARTMENT OF LATIN

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Rose.....	1							1
3	Rose.....	1							1
41	Gates, Rose.....	3				1			4
53	Rose.....			3	1				4
57	Rose.....	1				2		2	5
65	Rose.....	1							1
101	Rosborough.....					2			2
109	Gates.....					1			1
111	Rosborough.....			1	2	2			5
131	Rogers.....			1	1	2			4
205	Gates.....						2		2
281	Rogers.....						4		4
311	Rosborough.....						3		3
341	Rogers.....						7		7
375	Rosborough.....						5		5
<i>Total</i>		7		5	4	10	21	2	49

DEPARTMENT OF MATHEMATICS

1	Aldridge, Rankin.....	50	5	8				1	64
3	Dressel, Elliott, Hickson, Miles, Patterson, Rankin.....	113	6	6		1			126
4	Gilbert.....		7	5	2				14
7	Gergen, Dressel, Elliott, Miles, Rankin, Roberts.....	150	2	10	5		1		168
9	Dressel, Patterson, Roberts.....	61	1					1	63
11	Greenwood.....	20	1						21
50	Carlitz, Hickson, Seward.....	8	10	25	4	2		1	50
71	Hickson.....		1	17	6	5			29
99	Elliott, Miles, Patterson.....		13	44	4		1		62
100	Rankin.....		2	10	6				18
131	Elliott.....			1	10	3			14
139	Thomas.....				2	1	1		4
161	Carlitz.....				1				1
163	Gergen, Miles.....					2			2
235	Thomas.....					1	5		6
281	Miles.....					1	9		10
291	Carlitz.....					1	5		6
325	Gergen.....						6		6
371	Roberts.....						3		3
Theses	Gergen, Carlitz, Roberts, Thomas.....						10		10
<i>Total</i>		402	48	126	40	17	41	3	677

DEPARTMENT OF MUSIC

11	Bruinsma.....	6	1	3	1	1			12
61	Bruinsma.....		1	2	1				4
71	Bruinsma.....		1		1				2

DEPARTMENT OF MUSIC (*Continued*)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
81	Broadhead.....	1	6	17	2	8	.....	.....	34
131	Bruinsma.....	.....	.....	.....	1	3	.....	.....	4
197	Broadhead.....	.....	.....	.....	2	.....	.....	.....	2
<i>Total</i>		7	9	22	8	12	.....	.....	58

DEPARTMENT OF PHILOSOPHY

98	Morgan.....	.....	7	12	6	1	.....	.....	26
101	Widgery, Mrs. Gilbert.....	.....	2	19	44	38	.....	.....	103
105	McLarty.....	1	.....	9	12	20	.....	2	44
119	McLarty.....	.....	.....	3	8	3	.....	.....	14
121	McLarty.....	.....	.....	.....	5	.....	.....	.....	5
201	Mrs. Gilbert.....	.....	.....	.....	.....	8	1	1	10
203	Morgan.....	.....	.....	.....	1	6	1	.....	8
205	Widgery.....	.....	.....	.....	.....	2	8	.....	10
231	Leonard.....	.....	.....	.....	1	2	1	.....	4
241	Leonard.....	.....	.....	.....	.....	3	2	.....	5
245	Dubs.....	.....	.....	.....	.....	1	10	.....	11
301	Widgery.....	.....	.....	.....	.....	.....	8	.....	8
325	Leonard.....	.....	.....	.....	.....	.....	2	.....	2
Honors	Morgan.....	.....	.....	.....	.....	5	.....	.....	5
<i>Total</i>		1	9	43	77	89	33	3	255

DEPARTMENT OF PHYSICAL EDUCATION (MEN)

1	Aycock, Clark, Gerard, Persons.....	22	18	42	7	5	.....	.....	94
3	Warren.....	32	1	8	4	.....	.....	.....	45
5	Chambers.....	15	1	1	.....	.....	.....	.....	17
7	Aycock, Chambers, Fogleman, Warren...	33	16	37	5	4	.....	.....	95
11	Gerard.....	13	1	6	.....	2	.....	.....	22
13	Persons.....	69	3	7	4	1	.....	.....	84
15	Fogleman, Gerard, Persons.....	54	11	37	3	3	.....	.....	108
17	Fogleman, Gerard, Persons.....	118	11	45	10	5	.....	.....	189
19	Aycock.....	3	1	4	1	.....	.....	.....	9
21	Clark, Gerard, Lewis.....	39	8	26	4	2	.....	.....	79
25	Aycock.....	6	1	2	.....	.....	.....	.....	9
27	Aycock.....	13	1	3	.....	1	.....	.....	18
35	Fearing.....	24	9	19	4	2	.....	.....	58
37	Caldwell.....	59	2	.....	.....	.....	.....	.....	61
41	Lewis.....	14	.....	.....	.....	.....	.....	.....	14
55	Chambers.....	1	4	2	1	3	.....	.....	11
59	Coombs.....	.....	12	14	4	3	.....	.....	33
61	Crichton.....	1	3	6	7	7	.....	.....	24
75	Lewis.....	.....	2	8	.....	.....	.....	.....	10
79	Persons.....	.....	5	5	.....	.....	.....	.....	10
91	Lewis.....	.....	2	10	1	1	.....	.....	14
93	Gerard.....	.....	.....	9	1	3	.....	.....	13
132	Aycock.....	.....	.....	3	1	.....	.....	.....	4
187	Gerard.....	.....	10	6	2	1	.....	.....	19
<i>Total</i>		516	122	300	59	43	.....	.....	1,040

DEPARTMENT OF PHYSICAL EDUCATION (WOMEN)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Nur- ses</i>	<i>Total</i>
Golf.....	Miss Dowling.....	17	1	28	19	6				71
Hockey.....	Mrs. Bookhout.....	33	4	34	17	1				89
Light Sports.	Miss Lewis.....	3		5	5					13
Riding.....	Mrs. Bookhout, Miss Dowling, Miss Lewis, Miss Wyche.....	23	1	19	9	1				53
Soccer.....	Miss Lewis.....	14	6	19	15	4				58
Swimming...	Miss Grout, Mrs. Bookhout, Miss Dowling, Miss Lewis, Miss Wyche.....	78	6	30	16	6		1	79	216
Tennis.....	Miss Grout, Mrs. Bookhout, Miss Lewis, Miss Wyche.....	69		39	38	6				152
Volley Ball..	Miss Grout, Mrs. Bookhout, Miss Dowling, Miss Wyche...	23	10	63	35	5				136
41	Miss Wyche.....	9	4	9		2				24
<i>Total</i> ..		269	32	246	154	31		1	79	812

DEPARTMENT OF PHYSICS

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Carpenter, Edwards, Hatley, Hebb.....	91	16	26	4	1			138
17	Bonner, Hebb, Mouzon.....	81							81
51	Bonner, Carpenter, Hatley.....	1	10	77	25	2		1	116
57	Bonner, Hebb, Mouzon.....		16	41		1			58
59	Nielsen.....			1	7	1			9
61	Carpenter.....			3	2	3			8
65	Edwards.....		1	5	4				10
103	Constant.....			1	1	3			5
203	Hebb.....					1	5		6
205	Hatley.....						3		3
213	Constant.....				1	3	14		18
215	Nielsen, Mouzon.....				1		6		7
217	Nielsen, Mouzon.....						3		3
221	Constant.....					1	5		6
303	Sponer.....						17		17
319	Nordheim.....						4	2	6
351	Bonner, Hebb.....						9		9
353	Constant, Mouzon, Sponer.....						7		7
Thesis	Nielsen.....						1		1
<i>Total</i> ..		173	43	154	45	16	74	3	508

DEPARTMENT OF POLITICAL SCIENCE

21	Miss Foster, Gibson.....	92	2						94
61	Wilson, Gibson, Linebarger, Rankin, Shipman, Simpson.....	73	206	67	21				367
113	Linebarger.....	2	1	5	1				9
125	Cole.....	2	5	14	6				27
207	Wilson.....				3	6	3		12
209	Rankin.....				2	7	2		11

DEPARTMENT OF POLITICAL SCIENCE (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
211	Linebarger.....	.....	.....	.....	2	1	2	.....	5
225	Cole.....	.....	.....	.....	2	11	5	.....	18
227	Wilson.....	.....	.....	.....	3	8	1	.....	12
229	Cole.....	.....	.....	.....	1	.....	6	.....	7
241	Shipman.....	.....	.....	.....	1	4	7	.....	12
271	von Beckerath.....	.....	.....	.....	.....	.....	2	1	3
291	Rankin.....	.....	.....	.....	.....	6	.....	.....	6
<i>Total</i>	.....	92	79	212	100	71	28	1	583

DEPARTMENT OF PSYCHOLOGY

101	Lundholm, Miss MacColl, Zener.....	.....	.....	18	119	30	.....	.....	167
104	Adams.....	.....	.....	1	6	.....	.....	.....	7
107	Lundholm.....	.....	.....	.....	.....	8	.....	.....	8
223	Lundholm.....	.....	.....	7	5	23	.....	.....	35
226	Zener.....	.....	.....	.....	.....	1	12	.....	13
303	Zener.....	.....	.....	.....	.....	.....	3	.....	3
313	Rhine.....	.....	.....	.....	.....	.....	2	.....	2
315	Adams.....	.....	.....	.....	.....	.....	12	.....	12
<i>Total</i>	.....	.....	.....	26	130	62	29	.....	247

DEPARTMENT OF RELIGION

1	Benton, Crum, Myers, Ormond, Outler, Mrs. Spence.....	215	7	6	1	1	.....	.....	230
51	Outler, Petry, Spence, Mrs. Spence.....	30	90	16	.....	.....	.....	1	137
101	Ormond.....	5	9	18	15	.....	.....	.....	47
103	Myers.....	2	10	20	5	.....	.....	.....	37
163	Mrs. Spence.....	1	5	6	8	.....	.....	.....	20
167	Spence.....	2	8	26	28	.....	.....	.....	64
169	Crum.....	1	14	37	13	.....	.....	.....	65
181	Cannon.....	.....	.....	31	24	.....	.....	.....	55
201	Stinespring.....	.....	.....	.....	1	.....	.....	.....	1
203	Stinespring.....	.....	.....	.....	1	3	.....	.....	4
213	Branscomb.....	.....	.....	.....	1	1	1	.....	3
217	Clark.....	.....	.....	.....	1	1	.....	.....	2
262	Spence.....	.....	.....	.....	3	6	.....	.....	9
265	Spence.....	1	2	7	17	.....	.....	.....	27
275	Hickman.....	.....	.....	.....	3	1	.....	.....	4
281	Cannon.....	.....	.....	.....	.....	2	.....	.....	2
285	Dubs.....	.....	.....	.....	3	9	.....	.....	12
301	Russell.....	.....	.....	.....	.....	.....	1	.....	1
307	Stinespring.....	.....	.....	.....	.....	1	.....	.....	1
309	Stinespring.....	.....	.....	.....	.....	.....	1	.....	1
337	Garber.....	.....	.....	.....	.....	.....	2	.....	2
<i>Total</i>	.....	215	49	144	171	128	6	1	724

DEPARTMENT OF ROMANCE LANGUAGES
FRENCH

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ade. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Bridgers, Dow, Singer, Walton.....	65	16	13	10	1	.....	1	106
3	Webb, Bridgers, Cowper, Davis, Dow, Mrs. Dow, Jordan, Quynn, Miss Ray- mond, Walton.....	248	19	52	11	1	.....	2	333
51	Bridgers, Cowper, Davis, Dow, Jordan, Quynn, Miss Raymond, Young.....	18	33	142	49	12	.....	1	255
55	Mrs. Dow.....	1	2	24	7	4	.....	.....	38
57	Webb, Walton.....	12	3	28	2	1	.....	.....	46
87	Davis.....	.....	1	3	7	1	.....	.....	12
107	Cowper, Miss Raymond.....	.....	8	12	6	.....	.....	.....	26
111	Young.....	.....	2	9	13	5	.....	.....	29
113	Walton.....	.....	.....	3	4	2	.....	.....	9
127	Mrs. Dow.....	.....	1	2	3	2	.....	.....	8
215	Jordan.....	.....	.....	.....	1	9	4	.....	14
217	Webb.....	.....	.....	.....	.....	11	.....	.....	11
219	Cowper.....	.....	.....	.....	.....	.....	5	.....	5
350	Jordan.....	.....	.....	.....	.....	.....	5	.....	5
<i>Total</i> .....	.....	344	77	284	119	55	14	4	897

ITALIAN

181	Webb.....	.....	.....	1	6	3	.....	.....	10
<i>Total</i> .....	.....	.....	.....	1	6	3	.....	.....	10

SPANISH

1	Avilés, Davis, Dow, Hasbrouck, Quynn, Young.....	125	24	35	3	.....	.....	1	188
3	Avilés, Bridgers, Hasbrouck, Lundeberg, Quynn.....	28	15	70	13	1	.....	.....	127
65	Avilés, Lundeberg.....	3	8	33	36	13	.....	.....	93
101	Hasbrouck.....	.....	2	5	5	.....	.....	.....	12
153	Lundeberg.....	.....	1	5	3	3	.....	.....	12
157	Hasbrouck.....	.....	1	3	1	4	.....	.....	9
261	Lundeberg.....	.....	.....	.....	1	3	4	.....	8
<i>Total</i> .....	.....	156	51	151	62	24	4	1	449

SUMMARY FOR DEPARTMENT OF ROMANCE LANGUAGES

French.....	344	77	284	119	55	14	4	897
Italian.....	.....	.....	1	6	3	.....	.....	10
Spanish.....	156	51	151	62	24	4	1	449
<i>Total</i>	500	128	436	187	82	18	5	1,356

DEPARTMENT OF SOCIOLOGY

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
91	Jensen.....			42	24	8			74
101	Ellwood.....		1	10	19	18	1		49
109	Thompson.....			3	5	6		1	15
111	Jensen.....			2	9	9			20
205	Jensen.....					15	5		20
219	Thompson.....				3	13	3	3	22
231	Hart.....					9	10		19
233	Hart.....					2	19		21
317	Hart.....						6		6
319	Ellwood.....						10		10
330	Ellwood, Hart, Thompson.....						4		4
340	Thompson.....						4		4
350	Jensen.....						2		2
421	Hart.....						4		4
<i>Total</i>			1	57	60	80	68	4	270

DEPARTMENT OF ZOOLOGY

1	Bookhout, Miss Culbreth, Miss Jeffers, Johnson.....	273	16	29	4	4			326
53	Miss Culbreth, Gray, Johnson.....		6	40	19	8	1	1	75
109	Johnson.....			1	3	6			10
151	Hall.....			4	12	21		1	38
161	Pearse.....			1	13	14			28
219	Pearse, Cunningham.....					1	2		3
229	Cunningham.....					13	9		22
303	Pearse.....					12			12
321	Hall.....					10			10
341	Hargitt.....					10			10
351	Pearse, Bookhout, Miss Culbreth, Cunningham, Gray, Hall, Hargitt, Miss Jeffers, Johnson.....						16		16
353	Hall, Hargitt.....					4			4
355	Gray.....					3			3
<i>Total</i>		273	22	75	51	106	28	2	557

TABLE 6
B
CORRELATION OF COURSES IN DUKE UNIVERSITY
SPRING SEMESTER, 1938-39

DEPARTMENT OF BOTANY

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
1	Kramer.....	14	2	2					18
2	Anderson, Miss Boomhour, Kramer, Oosting, Perry.....	110	4	21	5	1			141
52	Bloomquist.....			2	2	1			5
103	Wolf.....			5	6	8			19
104	Anderson.....					1			1
156	Oosting.....			1	2	1			4
202	Perry.....						4		4
224	Wolf.....						5		5
226	Blomquist, Anderson, Kramer, Oosting, Perry, Wolf.....					2	11		13
341	Kramer.....						4		4
360	Blomquist, Oosting, Perry, Wolf.....						5		5
398	Blomquist, Anderson, Kramer, Oosting, Perry, Wolf.....						8		8
For. 324	Wolf.....						3		3
<i>Total</i>		124	6	31	15	14	40		230

DEPARTMENT OF CHEMISTRY

2	Bradsher, Miss Brown, Hill, Hobbs, Saylor, Wilson.....	238	6	16	7	1			268
70	Hobbs, Saylor, Vosburgh.....	14		91	22	3		1	131
142	Wilson.....			2	3				5
152	Bigelow, Bradsher, Miss Brown, Hauser..			6	30	12	1		49
154	Miss Brown, Hauser, Vosburgh.....			1	2	2			5
174	Vosburgh.....			2	2	4			8
216	Gross, Hill, Vosburgh.....					2	14		16
242	Wilson.....				4	11		1	16
254	Bigelow, Miss Brown, Hauser.....						6		6
262	Gross, Hobbs, Saylor.....				2	18	3		23
274	Gross.....						15		15
276	Gross, Bigelow, Miss Brown, Hauser, Hill, Hobbs, Saylor, Vosburgh.....					7	26	1	34
340	Gross, Hill, Hobbs, Saylor, Vosburgh....						14		14
<i>Total</i>		252	6	118	72	60	79	3	590

DEPARTMENT OF ECONOMICS AND BUSINESS ADMINISTRATION

11	Lemert.....	48							48
52	Berry, Delaplane, Hargreaves, Landon, O'Leary, Oliver, Smith, Spengler.....		16	332	69	8		2	427
58	Black, deVyver, Eiteman, Havens, Keech, Shields.....		9	152	34	15			210
116	Lemert.....				8	5			13

DEPARTMENT OF ECONOMICS AND BUSINESS ADMINISTRATION (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
118	Lemert.....		2	4	4	5			15
138	Berry, Smith.....			50	4	1			55
144	Eiteman, Oliver, Smith.....			10	116	11			137
158	Keech.....			4	68	12			84
168	Landon.....			2	50	13	1		66
172	Shields.....			4	59	5	1		69
174	Black.....					21			21
178	Shields.....					13			13
182	Springer.....				12	136		1	149
184	Black.....					13			13
204	Delaplane, Oliver, Welfling.....			2	136	1	1		140
216	Hoover.....				4	8	11		23
218	Spengler.....				2	29	2	1	34
232	Hamilton.....					31	1		32
238	Springer.....					8	5		13
242	Spengler.....				1	5	10		16
246	von Beckerath.....				1	8	1		10
260	deVyver.....				2	45	3		50
266	Hamilton.....					19	6		25
268	von Beckerath.....					6			6
276	Black.....				4	21	2		27
311	Hamilton.....						12		12
314	Hoover.....						5		5
Honors	deVyver, Welfling.....				6	4			10
<i>Total</i>		48	27	508	492	581	62	5	1,723

DEPARTMENT OF EDUCATION

1	Watson.....	18	1						19
4	Eicher.....	30	2	31					63
8	Eicher, Watson.....	88	2	19	1				110
54	Holton, Carr.....		9	30	17	10			66
58	Easley.....		1	9	18	3			31
68	Easley.....		1	17	13	11			42
103	Proctor.....			13	10	4			27
112	Carr.....					7			7
116	Childs.....					21			21
118	Brownell.....			1	17	12			30
122	Carr.....					7			7
200	Holton.....				2	5	3		10
205	Childs.....					2	2		4
218	Brownell.....					1	6		7
222	Carr.....						1		1
228	Easley.....					1	6		7
234	Proctor.....				2	6	2		10
247	Brownell.....						7		7
300	Childs, Proctor.....						22		22
343	Proctor.....						3		3
<i>Total</i>		136	16	120	80	90	52		494

REPORT OF THE PRESIDENT

DEPARTMENT OF CIVIL ENGINEERING

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
107	Williams.....			1	10	1			12
108	Hall.....			1	8				9
112	Bird.....					7			7
114	Williams.....				5				5
117	Williams.....			6	1				7
118	Williams.....	2		6	1				9
120	Bird.....					7			7
124	Hall.....					7			7
132	Bird.....				2				2
134	Bird.....					7			7
144	Bird, Hall.....					6			6
240	Bird.....					1			1
<i>Total</i>		2		14	27	36			79

DEPARTMENT OF ELECTRICAL ENGINEERING

7	Meier.....		1	10	1				12
52	Meier.....			15	1				16
152	Meier.....			1	6	1			8
154	Ranson.....		1	2	14				17
156	Ranson.....				1	7			8
158	Ranson.....					8			8
162	Seeley.....			1	6	1			8
166	Seeley, Meier.....					16			16
258	Meier.....		1	2		8			8
262	Seeley.....					8			8
264	Seeley.....					5			5
266	Seeley, Meier, Ranson.....					4			4
<i>Total</i>			2	29	29	58			118

DEPARTMENT OF MECHANICAL ENGINEERING

2	Pigage.....	73		5	1			1	80
8	Pigage.....			7	6				13
82	Chapman, Reed.....			34	2				36
86	Chapman, Pigage.....	6	5	47					58
170	Reed.....		1	2	10				13
174	Wilbur.....				2	10			12
176	Wilbur.....					2			2
182	Reed.....			2	6				8
186	Wilbur.....		1	2	14				17
187	Wilbur.....			1	2				3
188	Wilbur.....		2	2	14				18
190	Chapman.....		1	2	14				17
192	Pigage.....				2	9			11
194	Reed.....				2	10			12

DEPARTMENT OF MECHANICAL ENGINEERING (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
196	Reed.....				2	10			12
198	Chapman.....				2	9			11
200	Wilbur.....			1	6	1			8
<i>Total</i>		79	10	105	85	51		1	331

DEPARTMENT OF ENGLISH

1	Ward.....	46		1					47
2	Allen, Blackburn, Carpenter, Fitzgerald, Harwell, Irving, Johnson, Martin, Patton, Miss Poteat, Sanders, Sugden, Mrs. White, Mrs. Vance	659	3	5	2			3	672
53	Jordan.....			7	3	3			13
54	Jordan.....			5	3			2	10
56	Blackburn, Irving, Patton, Sanders, Sugden, Mrs. Vance, Ward	3	5	225	24	3			260
64	Mitchell.....			33	2	1			36
66	Sanders.....	2	2	7					11
102	Mitchell.....			5	7	3			15
104	Blackburn.....			7		2		1	10
106	West.....			1		1			2
108	Sugden.....		1		7	5			13
120	West.....		1	5	34	50			90
122	West.....		1	5	3				9
124	Brown.....				13	20			33
126	Patton.....			3	20	19			42
128	Greene.....			2	10	17			29
130	Mitchell, Mrs. Vance.....		1	5	34	30			70
133	White.....			2		2			4
138	Stroven.....				56	25			81
140	West.....			3	2	11			16
142	Jordan.....				1	13			14
144	Greene.....			1	4	2			7
151	Lewis.....			9	7				16
152	Herring, Lewis.....		2	13	68	15			98
156	Mrs. White.....			1	45	46			92
202	Brown.....						4		4
204	Baum.....					4	6		10
210	Ward.....				2		8		10
216	Allen.....					5	9		14
220	Irving.....					5	9		14
234	Gohdes.....				1	10	13		24
239	Brown.....						7		7
350	Baum, White.....						10		10
Honors	Blackburn, Irving, Ward.....				9	5			14
Remedial	Fitzgerald, Harwell.....	49							49
<i>Total</i>		759	16	345	357	297	66	6	1,846

REPORT OF THE PRESIDENT

DEPARTMENT OF FINE ARTS

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
2	Miss Hamlin.....	27							27
51	Miss Hall.....			7	3	8			18
52	McDonald.....			47	13	14		1	75
54	Miss Hamlin.....			6	6			1	13
92	McDonald.....			6	7	5			18
104	Miss Hall.....				2	1			3
108	Miss Hamlin.....			6	10	7			23
120	Miss Hall.....				1	1			2
<i>Total</i>		27		72	42	36		2	179

DEPARTMENT OF FORESTRY

52	Thomson.....			5	6	2			13
212	Wackerman.....			1	1	2			4
Bot. 226	Harrar.....						1	1	2
252	Schumacher.....					2			2
258	Harrar.....						2		2
260	Harrar.....					1			1
264	Korstian.....					2	1		3
266	Korstian.....					1			1
278	Thomson.....					2			2
358	Korstian, Schumacher, Harrar.....						2		2
Theses	Harrar, Schumacher.....						2		2
<i>Total</i>				6	7	12	8	1	34*

*Exclusive of students in the School of Forestry.

DEPARTMENT OF GEOLOGY

52	Berry.....		2	28	14	7			51
102	Berry.....				2	4			6
152	Berry.....				2	1			3
<i>Total</i>			2	28	18	12			60

DEPARTMENT OF GERMAN

2	Krummel, Maxwell, Shears, Wilson, Young.....	118		42	5			1	166
4	Krummel, Maxwell, Shears, Wilson, Young.....	27	4	103	22	3		1	160
52	Vollmer.....	3		11	4				18
102	Maxwell.....				7	3			10
104	Wilson.....				6	5			11
108	Maxwell, Wannamaker.....	1		19	42	15			77
110	Krummel.....	1		2	10				13
114	Wilson.....				5	1			6

DEPARTMENT OF GERMAN (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
118	Vollmer.....				2	3	1	.....	6
122	Vollmer.....			1	6	2	.....	.....	9
124	Shears.....			1	15	5	.....	.....	21
210	Krummel.....				3	3	.....	.....	6
212	Vollmer.....				3	5	2	.....	10
<i>Total</i> ..	.....	150	4	179	130	45	3	2	513

DEPARTMENT OF GREEK

2	Truesdale.....	4	.....	2	2	.....	1	.....	9
54	Truesdale.....			2	.....	.....	1	.....	3
106	Truesdale.....				2	1	1	.....	4
108	Truesdale.....					4	.....	.....	4
116	Way.....					1	2	.....	3
118	Peppler.....					2	3	.....	5
122	Peppler.....			1	5	66	.....	.....	72
142	Way.....			1	2	9	.....	.....	12
210	Way.....						3	.....	3
246	Way.....					1	2	.....	3
308	Peppler.....						2	.....	2
Honors	Peppler.....					2	.....	.....	2
Theses	Peppler.....						1	.....	1
<i>Total</i> ..	.....	4	.....	6	11	86	16	.....	123

DEPARTMENT OF HISTORY

1	Carroll, Hamilton.....	89	.....	.....	.....	.....	.....	.....	89
2	Miss Chaffin, Clyde, Manchester, McCloy, Nelson, Mrs. Quynn, Ropp...	366	.....	.....	.....	.....	.....	.....	336
51	Munyan.....		4	38	22	6	.....	.....	70
52	Miss Baldwin, Mabry, Robert.....		6	72	38	8	.....	.....	124
66	McCloy.....		7	38	7	3	.....	.....	55
92	Mabry, Robert, Still.....		9	130	61	30	.....	.....	230
102	Mrs. Quynn.....			3	8	3	.....	.....	14
106	Hamilton.....			1	52	9	.....	.....	62
108	Munyan.....				5	8	4	.....	17
110	Nelson.....					2	3	.....	5
114	Lanning.....		1	7	30	18	.....	.....	56
124	Laprade.....					21	38	.....	59
130	Manchester.....			1	17	14	.....	.....	32
136	Carroll.....		2		28	22	.....	.....	52
142	Clyde.....				10	7	.....	.....	17
154	Sydnor.....				9	8	.....	1	18
204	Woody.....				1	6	1	.....	8
210	Still.....					16	2	.....	18
218	Carroll.....					9	11	.....	20
224	Mrs. Quynn.....					2	1	.....	3
226	Nelson.....					2	2	.....	4
232	Lanning.....				2	18	4	.....	24

REPORT OF THE PRESIDENT

DEPARTMENT OF PHYSICS

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
2	Carpenter, Edwards, Hatley, Hebb.....	80	1	32	10	.....	.....	.....	123
18	Bonner, Hebb, Mouzon.....	65	.....	.....	.....	.....	.....	.....	65
52	Nielsen, Carpenter, Hatley.....	1	.....	65	29	6	1	.....	102
58	Bonner, Hebb, Mouzon.....	.....	1	45	3	.....	.....	.....	49
60	Nielsen.....	.....	.....	1	6	1	.....	1	9
62	Carpenter.....	.....	.....	1	2	5	.....	1	9
66	Edwards.....	.....	.....	4	1	.....	.....	.....	5
104	Constant.....	.....	.....	1	6	1	.....	.....	8
106	Bonner.....	.....	.....	2	3	7	.....	.....	12
204	Hebb.....	.....	.....	.....	.....	1	4	.....	5
206	Hatley.....	.....	.....	.....	.....	.....	3	.....	3
214	Constant.....	.....	.....	.....	.....	3	12	.....	15
216	Nielsen, Mouzon.....	.....	.....	.....	1	6	.....	.....	7
218	Nielsen, Mouzon.....	.....	.....	.....	.....	.....	3	.....	3
222	Constant.....	.....	.....	.....	.....	1	4	.....	5
304	Miss Sponer.....	.....	.....	.....	.....	.....	4	.....	4
320	Nordheim.....	.....	.....	.....	.....	.....	6	.....	6
352	Constant, Nordheim.....	.....	.....	.....	.....	.....	9	.....	9
354	Nielsen, Constant, Mouzon, Miss Sponer.....	.....	.....	.....	.....	.....	7	.....	7
<i>Total</i>	.....	146	2	151	60	26	59	2	446

DEPARTMENT OF POLITICAL SCIENCE

22	Gibson, Linebarger.....	117	1	.....	.....	.....	.....	.....	118
61	Gibson.....	.....	3	10	1	1	.....	.....	15
62	Wilson, Cole, Gibson, Linebarger, Rankin, Shipman, Simpson.....	.....	10	211	87	28	.....	.....	336
136	Cole.....	.....	.....	4	19	15	.....	.....	38
172	von Beckerath.....	.....	.....	2	3	2	.....	.....	7
212	Linebarger.....	.....	.....	.....	4	3	1	.....	8
226	Cole.....	.....	.....	.....	1	11	4	.....	16
228	Wilson.....	.....	.....	.....	3	8	1	.....	12
230	Rankin.....	.....	.....	.....	2	7	2	.....	11
242	Shipman.....	.....	.....	.....	.....	5	6	.....	11
244	Shipman.....	.....	.....	.....	1	5	1	.....	7
310	Rankin.....	.....	.....	.....	.....	.....	3	.....	3
328	Wilson.....	.....	.....	.....	.....	.....	3	.....	3
Honors	Cole.....	.....	.....	.....	5	.....	.....	.....	5
<i>Total</i>	.....	117	14	227	126	85	21	.....	590

DEPARTMENT OF PSYCHOLOGY

101	Miss MacColl, Pratt.....	.....	.....	24	35	7	.....	.....	66
114	Rhine.....	.....	.....	.....	27	11	.....	.....	38
115	Miss MacColl.....	.....	.....	1	20	7	.....	.....	28
201	Adams.....	.....	.....	.....	.....	.....	3	.....	3
202	Lundholm.....	.....	.....	.....	1	8	3	.....	12
204	Zener.....	.....	.....	.....	.....	1	5	.....	6

DEPARTMENT OF PSYCHOLOGY (*Continued*)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
211	Zener.....						4	.....	4
228	Lundholm.....					6	1	.....	7
304	Lundholm, Zener.....						2	.....	2
306	Adams.....						9	.....	9
314	Rhine.....						2	.....	2
Theses	Rhine.....						4	.....	4
<i>Total</i>	.....			25	83	40	33	.....	181

DEPARTMENT OF RELIGION

2	Myers, Crum, Ormond, Outler, Mrs. Spence.....	281	2	.....	.....	.....	.....	1	284
52	Outler, Petry, Spence, Mrs. Spence.....		8	101	26	3	.....	1	139
102	Ormond.....		1	1	31	13	.....	.....	46
116	Myers.....			5	33	8	.....	1	47
163	Mrs. Spence.....			11	2	.....	.....	1	14
170	Crum.....			11	31	27	.....	.....	69
182	Cannon.....			.....	26	29	.....	.....	55
202	Stinespring.....			.....	.....	1	.....	.....	1
204	Russell.....			.....	.....	4	.....	.....	4
214	Branscomb.....			.....	.....	.....	1	.....	1
220	Clark.....			.....	.....	2	1	.....	3
261	Smith.....			.....	.....	1	1	.....	2
267	Spence.....			.....	1	11	.....	.....	12
268	Spence.....			.....	4	39	.....	.....	43
270	Spence.....			.....	27	41	.....	.....	68
276	Hickman.....			.....	.....	2	.....	.....	2
284	Cannon.....			.....	2	3	.....	.....	5
308	Stinespring.....			.....	.....	1	.....	.....	1
310	Stinespring.....			.....	.....	.....	1	.....	1
312	Russell.....			.....	.....	.....	2	.....	2
385	Dubs.....			.....	.....	.....	38	.....	38
<i>Total</i>	.....	281	11	129	183	185	44	4	837*

*Exclusive of students in the School of Religion.

DEPARTMENT OF ROMANCE LANGUAGES
FRENCH

2	Dow, Singer, Walton.....	47	2	20	10	2	.....	1	82
4	Webb, Bridgers, Cowper, Davis, Dow, Mrs. Dow, Quynn, Miss Raymond, Singer.....	232	3	51	14	2	.....	.....	302
52	Bridgers, Cowper, Davis, Dow, Quynn, Miss Raymond, Young.....	17	1	152	52	20	.....	1	243
56	Mrs. Dow.....	1	.....	15	4	4	.....	.....	24
58	Webb, Walton.....	10	1	25	1	1	.....	.....	38
88	Davis.....	.....	.....	4	3	1	.....	.....	8
108	Cowper, Miss Raymond.....	.....	.....	6	14	3	.....	.....	23

FRENCH (*Continued*)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
112	Young.....	.....	.....	5	20	6	.....	.....	31
114	Walton.....	.....	.....	2	2	1	.....	.....	5
128	Dow.....	.....	1	3	5	1	.....	.....	10
218	Webb.....	.....	.....	.....	.....	9	3	.....	12
220	Cowper.....	.....	.....	.....	.....	.....	4	.....	4
233	Walton.....	.....	.....	.....	.....	9	2	.....	11
<i>Total</i> .....	.....	307	8	283	125	59	9	2	793

ITALIAN

182	Webb.....	.....	.....	.....	5	6	.....	.....	11
<i>Total</i> .....	.....	.....	.....	.....	5	6	.....	.....	11

SPANISH

2	Avilés, Davis, Dow, Hasbrouck, Young..	85	1	39	4	.....	.....	1	130
4	Bridgers, Hasbrouck, Lundeborg, Quynn..	25	2	60	19	.....	.....	.....	106
66	Avilés, Lundeborg.....	3	3	30	39	13	.....	.....	88
102	Hasbrouck.....	.....	.....	1	5	1	.....	.....	7
154	Avilés.....	.....	.....	4	3	1	.....	.....	8
158	Hasbrouck.....	.....	.....	3	2	5	.....	.....	10
262	Lundeborg.....	.....	.....	.....	1	3	3	.....	7
<i>Total</i> .....	.....	113	6	137	73	23	3	1	356

SUMMARY FOR THE DEPARTMENT OF ROMANCE LANGUAGES

French...	.....	307	8	283	125	59	9	2	793
Italian...	.....	.....	.....	.....	5	6	.....	.....	11
Spanish...	.....	113	6	137	73	23	3	1	356
<i>Total</i> .....	.....	420	14	420	203	88	12	3	1,160

DEPARTMENT OF SOCIOLOGY

92	Jensen.....	.....	.....	33	31	8	.....	.....	72
114	Thompson.....	.....	.....	.....	18	14	.....	.....	32
206	Jensen.....	.....	.....	.....	6	14	3	.....	23
220	Thompson.....	.....	.....	.....	4	6	1	3	14
232	Hart.....	.....	.....	.....	1	5	3	.....	9
234	Hart.....	.....	.....	.....	3	7	26	.....	36
242	Groves.....	.....	.....	.....	2	70	7	1	80
316	Hart.....	.....	.....	.....	.....	.....	1	.....	1
320	Jensen.....	.....	.....	.....	.....	.....	8	.....	8
330	Jensen, Thompson.....	.....	.....	.....	.....	.....	4	.....	4

DEPARTMENT OF HISTORY (*Continued*)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
241	Clyde.....					14	2	.....	16
305	Laprade.....						6	.....	6
307	Woody.....						2	.....	2
315	Sydnor.....						14	.....	14
317	Carroll.....						2	.....	2
321	Lanning.....						1	.....	1
325	Laprade.....						6	.....	6
337	Sydnor.....						12	.....	12
Honors	Laprade, Sydnor.....					2		.....	2
<i>Total</i>		425	29	295	316	242	66	1	1,374

DEPARTMENT OF LATIN

2	Rose.....	1							1
42	Gates, Rose.....	5				1			6
54	Rose.....			2	1				3
58	Rose.....	2		2	1	3			8
66	Rose.....	1							1
102	Rosborough.....					2			2
112	Rosborough.....			2	2	5			9
132	Rogers.....		1	2	5	3		1	12
206	Gates.....						2		2
282	Rogers.....						4		4
312	Rosborough.....					2	2		2
342	Rogers.....						7		7
375	Rosborough.....						5		5
<i>Total</i>		9	1	8	9	14	20	1	62

DEPARTMENT OF MATHEMATICS

2	Aldridge, Rankin.....	53		11				1	65
4	Elliott, Hickson, Miles, Patterson, Rankin.....	90	3	17	2	2			114
7	Gilbert.....	14		1					15
8	Gergen, Elliott, Martin, Miles, Rankin, Roberts.....	87		8	6	1	1		103
10	Dressel, Patterson, Roberts.....	51							51
12	Greenwood.....	13	1	1					15
50	Gergen, Dressel.....	36		3	1				40
74	Hickson.....			7		3			10
99	Carlitz, Hickson.....	6	3	23	3	1		1	37
100	Elliott, Miles, Patterson.....		1	46	5	2	1		55
131	Miles.....			5	3				8
140	Thomas.....				2	1	1		4
160	Elliott.....			1	4	3			8
164	Dressel.....					1			1
204	Rankin.....				2	1	1		4
236	Thomas.....					1	4		5
282	Dressel.....					1	6		7
292	Carlitz.....					1	2		3

DEPARTMENT OF MATHEMATICS (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
326	Gergen.....	.....	.....	.....	.....	.....	5	.....	5
372	Roberts.....	.....	.....	.....	.....	.....	3	.....	3
Honors	Gergen, Carlitz.....	.....	.....	.....	1	1	.....	.....	2
Theses	Gergen, Carlitz, Roberts, Thomas.....	.....	.....	.....	.....	.....	9	.....	9
<i>Total</i>	.....	350	8	123	29	19	33	2	564

DEPARTMENT OF MUSIC

12	Bruinsma.....	5	.....	4	1	.....	.....	.....	10
62	Bruinsma.....	.....	1	1	2	.....	.....	.....	4
72	Bruinsma.....	.....	1	.....	1	.....	.....	.....	2
82	Broadhead.....	2	.....	17	1	11	.....	.....	31
132	Bruinsma.....	.....	.....	.....	.....	4	.....	.....	4
142	Broadhead.....	1	.....	1	2	.....	.....	.....	4
Pub. Sch. Music	Bruinsma.....	.....	.....	1	3	8	.....	2	14
<i>Total</i>	.....	8	2	24	10	23	.....	2	69

DEPARTMENT OF PHILOSOPHY

48	Leonard.....	20	2	14	3	.....	.....	.....	39
98	Mrs. Gilbert.....	.....	.....	18	24	3	.....	1	46
101	Widgery, McLarty.....	.....	1	24	36	22	.....	.....	83
106	McLarty.....	.....	1	4	14	16	.....	1	36
108	McLarty.....	.....	.....	1	7	6	.....	.....	14
111	Mrs. Gilbert.....	.....	.....	1	8	5	.....	.....	14
112	Morgan.....	.....	.....	2	1	3	.....	.....	6
202	Mrs. Gilbert.....	.....	.....	.....	.....	8	1	.....	9
208	Morgan.....	.....	.....	.....	.....	1	.....	.....	1
224	Widgery.....	.....	.....	.....	.....	3	3	.....	6
232	Leonard.....	.....	.....	.....	.....	2	1	.....	3
238	Widgery.....	.....	.....	.....	.....	5	2	.....	7
242	Leonard.....	.....	.....	.....	.....	2	4	.....	6
244	Morgan.....	.....	.....	.....	.....	1	3	.....	4
246	Dubs.....	.....	.....	.....	.....	1	14	.....	15
302	Widgery.....	.....	.....	.....	.....	.....	6	.....	6
Honors	Morgan.....	.....	.....	.....	1	.....	.....	.....	1
<i>Total</i>	.....	20	4	64	94	78	34	2	296

DEPARTMENT OF PHYSICAL EDUCATION (MEN)

2	Caldwell, Gerard.....	39	.....	12	1	.....	.....	.....	52
4	Warren.....	9	.....	6	1	1	.....	.....	17
6	Aycock, Clark.....	5	.....	6	.....	.....	.....	.....	11
8	Aycock, Gerard, Persons.....	34	4	18	6	2	.....	.....	64
12	Gerard, Persons.....	21	1	23	4	.....	.....	.....	49
14	Persons.....	58	3	23	4	2	.....	.....	90

DEPARTMENT OF PHYSICAL EDUCATION (MEN) (Continued)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Ado. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
16	Clark, Warren	8	2	32	3				45
18	Fogleman, Gerard	94	1	25	8	4			132
20	Aycock	12	1	7		1			21
22	Clark, Lewis, Stanley	36	1	22	1	4			64
26	Warren	9		14		1			24
32	Caldwell	26							26
34	Warren	9							9
36	Fearing	14	1	23	1	1			40
38	Hagler	37							37
42	Persons	15							15
44	Fogleman	6							6
46	Lewis	33							33
56	Aycock			6	2				8
62	Crichton, Hagler	1		45	13	18			77
80	Coombs		2	19	3	1			25
84	Warren		2	5		1			8
88	Hagler		7	20	3				30
90	Hagler			7	1				8
92	Fogleman			3	1	1			5
94	Persons			15	5	2			22
96	Lewis		3	12	4	3			22
132	Aycock			6	5	2		1	14
173	Aycock		3	3	7	2			15
Freshman Hygiene	Aycock	425*							425*
<i>Total</i>		466	31	352	73	46		1	969

*Students included in other classes.

DEPARTMENT OF PHYSICAL EDUCATION (WOMEN)

Archery	Miss Grout, Mrs. Bookhout, Miss Lewis, Miss Wyche	36	2	58	41	4			141
Badminton	Mrs. Bookhout, Miss Dowling	28	3	31	24	1			82
Dancing	Miss Lewis	1		8	3	1			13
Golf	Miss Dowling	31		31	16	4			82
Recreational Leadership	Miss Dowling				2	1			3
Riding	Miss Grout, Mrs. Bookhout, Miss Dowling, Miss Wyche	24		10	4				38
Soft Ball	Miss Lewis, Miss Wyche	25	1	18	13	3			60
Swimming	Miss Dowling, Mrs. Bookhout, Miss Lewis, Miss Wyche	39	5	18	18	2			82
Tennis	Miss Grout, Mrs. Bookhout, Miss Lewis, Miss Wyche	103	3	45	24	1			176
42	Miss Wyche	34		1					35
102	Miss Grout			4	4	2		1	11
<i>Total</i>		316	14	224	149	19		1	723

DEPARTMENT OF SOCIOLOGY (*Continued*)

<i>Courses</i>	<i>Instructors</i>	<i>Fr.</i>	<i>Adv. Fr.</i>	<i>Soph.</i>	<i>Jr.</i>	<i>Sr.</i>	<i>Gr.</i>	<i>Sp.</i>	<i>Total</i>
340	Thompson.....						1	.....	1
350	Jensen.....						1	.....	1
422	Hart.....						4	.....	4
<i>Total</i>	.....			33	65	124	59	4	285

DEPARTMENT OF ZOOLOGY

2	Bookhout, Miss Culbreth, Gray, Miss Jeffers, Johnson.....	222	2	44	7	2	.....	.....	277
92	Cunningham, Miss Jeffers.....			24	18	6	1	1	50
110	Johnson.....			3	5	10	.....	.....	18
151	Miss Culbreth.....				1	3	.....	.....	4
156	Hargitt.....				3	13	1	.....	17
174	Bookhout.....			1	1	5	1	1	9
204	Pearse.....					2	3	.....	5
220	Pearse, Bookhout, Cunningham, Gray, Hall.....					11	3	.....	14
224	Gray.....				4	5	2	.....	11
256	Hall.....				1	14	.....	1	16
306	Pearse.....						3	.....	3
324	Hall.....						9	.....	9
352	Pearse, Miss Culbreth, Cunningham, Gray, Hall, Hargitt, Miss Jeffers, Johnson.....						15	.....	15
354	Pearse, Cunningham, Hall, Hargitt.....						14	.....	14
356	Hall.....						8	.....	8
<i>Total</i>	.....	222	2	72	40	71	60	3	470

W. K. GREENE,

Dean of Undergraduate Instruction.

ADMISSIONS TO TRINITY COLLEGE

1938-39

A study of the admission and college achievement records of our students in recent years leads the Committee on Admissions to feel that progress is being made in selective admissions. In our effort to select well-rounded students of promise, the selection of a fairly large per cent of the class is comparatively easy; the difficulty arises in choosing the remainder of the quota. It is of the utmost importance, however, that great care be exercised in studying the latter group; from this number many of our strongest and most versatile students are found, although their preparatory academic records do not place them within the first group. We are keenly aware of our responsibility in striving to select students who are academically and personally qualified to make up a well-rounded student body. It is apparent, therefore, that all sources

of information concerning the student's fitness be utilized and tested. The need for the discovery of additional criteria by which to judge applicants is also clear. Comparative records and personal observation indicate that those admitted during the year rank well with previous classes.

We are grateful to members of the New York City Alumni Association who have served on the interviewing committee for the metropolitan area. Their assistance in interviewing and making reports on applicants has been distinctly helpful to us.

From a total of approximately 1,700 applications, 511 Freshmen and 57 transfer students were enrolled. Of the Freshmen admitted, 409 were from high schools and 98 were from preparatory schools. It should be noted that a larger number of applications was received during the year than in any previous year. As will be seen from Table 1, first-year men continue to represent a large geographical area.

RECORDS OFFICE

The large increase in recent years in the number of applications received and in the size of the student body has made it necessary to secure and record additional information. I believe that our records are now more nearly adequate than at any previous time. Much information necessary for various studies is now readily available. Reports and letters are sent regularly to parents, and the registration of students each semester is handled promptly and efficiently. During the year, 1,018 transcripts were issued. The preparation of class schedules and the registration in classes through this office is obviously an improvement over plans formerly used.

I submit interesting tables showing the enrollment by classes, the average of grades and quality-points for all classes, and a comparison of the averages of fraternity and nonfraternity men in Trinity College.

TABLE 1
GEOGRAPHICAL DISTRIBUTION—FRESHMEN
1938-39

<i>State</i>		<i>State</i>	
Alabama	1	Missouri	1
Arkansas	2	New Jersey	51
Canal Zone	1	New York	66
Colorado	1	North Carolina	123
Connecticut	15	Ohio	22
District of Columbia.....	7	Oklahoma	1
England	1	Pennsylvania	72
Florida	16	Puerto Rico	1
Georgia	8	Rhode Island	1
Illinois	17	South Carolina	9
Indiana	1	Tennessee	11
Kentucky	9	Texas	2
Maine	1	Utah	1
Maryland	9	Vermont	1
Massachusetts	17	Virginia	22
Michigan	12	West Virginia	7
Minnesota	2		
		<i>Total</i>	511

TABLE 2

RELIGIOUS DISTRIBUTION OF FRESHMEN
1938-39

Baptist	49	Hebrew	17
Catholic	50	Lutheran	29
Christian	6	Methodist	141
Christian Scientist	7	None	34
Community	1	Presbyterian	81
Congregational	24	Reformed	3
Dutch Reformed	1	Society of Friends	2
Episcopal	57	Union	2
Ethical Culturist	1	Unitarian	1
Evangelical	4	Unity Society	1
		<i>Total</i>	511

For the sake of comparison, I give here the geographical and religious distribution of all students in Trinity College.

TABLE 3

GEOGRAPHICAL DISTRIBUTION—UNDERGRADUATE MEN OF TRINITY COLLEGE
1938-39

<i>State</i>		<i>State</i>	
Alabama	8	Minnesota	1
Arkansas	4	Mississippi	3
California	2	Missouri	2
Canada	2	Montana	1
Canal Zone	3	Nebraska	1
China	1	New Hampshire	2
Colorado	1	New Jersey	187
Connecticut	57	New York	267
Cuba	3	North Carolina	430
Delaware	12	Ohio	54
District of Columbia	26	Oklahoma	3
England	2	Oregon	1
Florida	58	Pennsylvania	194
Georgia	34	Philippine Islands	1
Idaho	1	Puerto Rico	1
Illinois	43	Rhode Island	2
Indiana	3	South Carolina	31
Japan	1	Tennessee	31
Kentucky	23	Texas	5
Korea	2	Vermont	6
Louisiana	3	Virginia	50
Maine	1	West Virginia	24
Maryland	44	Wisconsin	3
Massachusetts	51		
Michigan	25	<i>Total</i>	1,710

TABLE 4

RELIGIOUS DISTRIBUTION—UNDERGRADUATE MEN OF TRINITY COLLEGE
1938-39

Baptist	152	Lutheran	71
Catholic	145	Methodist	456
Christian	15	Moravian	3
Christian Reformed	1	None	146
Christian Scientist	22	Plymouth Brethren	1
Church of Christ.....	6	Presbyterian	303
Church of God.....	2	Quaker	7
Community	5	Reformed	10
Congregational	74	Salvation Army	1
Disciples of Christ.....	1	Seventh Day Adventist.....	1
Dutch Reformed	7	Unionist	3
Episcopal	211	Unitarian	8
Ethical Culture Society.....	1	United Brethren	2
Evangelical	7	United Church of Canada.....	1
Greek Orthodox	3	Unity Society	1
Hebrew	42	Universalist	1
Independent Christian	1		
		<i>Total</i>	1,710

TABLE 5

ENROLLMENT BY CLASSES
1938-39

Seniors	286*
Juniors	322
Sophomores	438
Freshmen	510
Advanced Freshmen	177
Specials	17
<i>Total</i>	1,750

Prior to the year 1937-38, this study was made on the basis of three semester hour courses. Due to the fact that the number of one, two, four, and five hour courses has greatly increased during the past few years, the average is now computed per semester hour.

TABLE 6

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS
UNDERGRADUATE MEN OF TRINITY COLLEGE

A

FRESHMAN CLASS
FALL SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	163	6.76
B	496	20.58
C	1,008	41.83
D	436	18.09
F	272	11.29
Incomplete ... 3)		
Absent 17)	35	1.45
Dropped 15)	2,410	100.00

* Forty of these completed their work in the preceding summer quarter but received the degree with this class.

Percentage passing grades	87.26
Percentage failing grades	11.29
Percentage Incomplete, Absent from Examination, and Dropped	1.45

QUALITY-POINTS

A	1,596	Total hours carried.....	7,724
B	3,176	Total hours passed.....	6,827
C	3,278	Total hours failed.....	897
	<hr/>		
	8,050	Total courses carried.....	2,375
Less F	897		
Total points earned.....	<hr/> 7,153		
Average per hour.....			.93
Average per course.....			3.01
Average per student.....			14.54

B

ADVANCED FRESHMAN CLASS FALL SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	8	1.00
B	48	5.98
C	265	33.04
D	262	32.67
F	187	23.32
Incomplete ... 11	<hr/> 32	<hr/> 3.99
Absent 18		
Dropped 3		
	802	100.00

Percentage passing grades.....	72.69
Percentage failing grades.....	23.32
Percentage Incomplete, Absent from Examination, and Dropped	3.99

QUALITY-POINTS

A	78	Total hours carried.....	2,420
B	296	Total hours passed.....	1,820
C	815	Total hours failed.....	600
	<hr/>		
	1,189	Total courses carried.....	770
Less F	600		
Total points earned.....	<hr/> 589		
Average per hour.....			.24
Average per course.....			.76
Average per student.....			3.53

C

SOPHOMORE CLASS
FALL SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	160	7.74
B	491	23.76
C	881	42.62
D	344	16.64
F	139	6.72
Incomplete ... 19	52	2.52
Absent 16		
Dropped 17		
	2,067	100.00
Percentage passing grades.....		90.76
Percentage failing grades.....		6.72
Percentage Incomplete, Absent from Examination, and Dropped		2.52

QUALITY-POINTS

A	1,587	Total hours carried.....	6,427
B	3,110	Total hours passed.....	5,978
C	2,802	Total hours failed.....	449
	7,499	Total courses carried.....	2,015
Less F.	449		
Total points earned.....	7,050		
Average per hour.....			1.10
Average per course.....			3.50
Average per student.....			17.45

D

JUNIOR CLASS
FALL SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	109	6.80
B	525	32.73
C	714	44.51
D	167	10.41
F	50	3.12
Incomplete ... 22	39	2.43
Absent 8		
Dropped 9		
	1,604	100.00
Percentage passing grades.....		94.45
Percentage failing grades.....		3.12
Percentage Incomplete, Absent from Examination, and Dropped		2.43

REPORT OF THE PRESIDENT

QUALITY-POINTS		
A	999	Total hours carried..... 4,826
B	3,174	Total hours passed..... 4,661
C	2,210	Total hours failed..... 165
	<hr/>	
	6,383	Total courses carried..... 1,565
Less F	165	
Total points earned.....	6,218	
<hr/>		
Average per hour.....		1.29
Average per course.....		3.97
Average per student.....		18.18

E

SENIOR CLASS

FALL SEMESTER—1938-39

Grade	Number	Percentage
A	152	12.36
B	478	38.86
C	481	39.11
D	73	5.93
F	12	.98
Incomplete ... 25	34	2.76
Absent 7		
Dropped 2		
	<hr/>	<hr/>
	1,230	100.00
Percentage passing grades.....		96.26
Percentage failing grades.....		.98
Percentage Incomplete, Absent from Examination, and Dropped		2.76

QUALITY-POINTS

A	1,365	Total hours carried..... 3,588
B	2,830	Total hours passed..... 3,549
C	1,461	Total hours failed 39
	<hr/>	
	5,656	Total courses carried..... 1,196
Less F	39	
Total points earned.....	5,617	
<hr/>		
Average per hour.....		1.57
Average per course.....		4.70
Average per student.....		23.12

F

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS
UNDERGRADUATE MEN OF TRINITY COLLEGE
FALL SEMESTER, 1938-39

Grade	Number	Percentage
A	592	7.30
B	2,038	25.12
C	3,349	41.28
D	1,282	15.80
F	660	8.13

Incomplete ..80	}	192	2.37
Absent .....66			
Dropped .....46			
		8,113	100.00

Percentage passing grades	89.50
Percentage failing grades	8.13
Percentage Incomplete, Absent from Examination, and Dropped	2.37

QUALITY-POINTS

A	5,625	Total hours carried	24,985
B	12,586	Total hours passed.....	22,833
C	10,566	Total hours failed.....	2,150
	28,777	Total courses carried.....	7,921
Less F	2,150		
Total points earned.....	26,627		

Average per hour	1.07
Average per course	3.36
Average per student	16.16

G

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS
UNDERGRADUATE MEN OF TRINITY COLLEGE
FALL SEMESTER—CLASS AVERAGES
1938-39

Freshman Class .....	.93
Advanced Freshman Class .....	.24
Sophomore Class	1.10
Junior Class	1.29
Senior Class	1.57
Undergraduate Men, Trinity College.....	1.07

TABLE 7

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS
UNDERGRADUATE MEN OF TRINITY COLLEGE

A

FRESHMAN CLASS
SPRING SEMESTER, 1938-39

Grade	Number	Percentage
A	167	7.58
B	479	21.74
C	945	42.90
D	422	19.16
F	169	7.67
Incomplete .. 5	21	.95
Absent .....12		
Dropped 4		
	2,203	100.00
Percentage passing grades	91.38	
Percentage failing grades	7.67	
Percentage Incomplete, Absent from Examination, and Dropped .....	.95	

QUALITY-POINTS

A	1,596	Total hours carried	7,034
B	3,032	Total hours passed	6,485
C	3,047	Total hours failed	549
	<hr/>		
	7,675	Total courses carried	2,182
Less F	549		
	<hr/>		
Total points earned.....	7,126		
Average per hour	1.013		
Average per course	3.265		
Average per student	15.390		

B

ADVANCED FRESHMAN CLASS
SPRING SEMESTER, 1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	2	.38
B	22	4.22
C	189	36.28
D	172	33.01
F	111	21.31
Incomplete .. 7)		
Absent 15)	25	4.80
Dropped 3)	<hr/> 521	<hr/> 100.00
Percentage passing grades	73.89	
Percentage failing grades	21.31	
Percentage Incomplete, Absent from Examination and Dropped	4.80	

QUALITY-POINTS

A	18	Total hours carried	1,561
B	132	Total hours passed	1,202
C	587	Total hours failed	359
	<hr/>		
	737	Total courses carried.....	496
Less F	344		
	<hr/>		
Total Points Earned	393		
Average per hour .....	.252		
Average per course .....	.792		
Average per student	3.707		

C

SOPHOMORE CLASS
SPRING SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	148	8.75
B	495	29.25
C	703	41.55
D	236	13.95
F	92	5.44

Incomplete ... 11	}.....	18	<u>1.06</u>
Absent 4			
Dropped 3			
		<u>1,692</u>	<u>100.00</u>

Percentage passing grades	93.50
Percentage failing grades	5.44
Percentage Incomplete, Absent from Examination, and Dropped	1.06

QUALITY-POINTS

A	1,431	Total hours carried	5,374
B	3,174	Total hours passed	5,060
C	2,234	Total hours failed	314
	6,839	Total courses carried	1,674
Less F	314		
Total points earned	6,525		

Average per hour	1.214
Average per course	3.897
Average per student	18.642

D

JUNIOR CLASS
SPRING SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	146	8.55
B	471	27.59
C	779	45.64
D	195	11.42
F	53	3.11
Incomplete .. 23	}.....	<u>63</u>
Absent 16		
Dropped 14		
	<u>1,707</u>	<u>100.00</u>

Percentage passing grades	93.20
Percentage failing grades	3.11
Percentage Incomplete, Absent from Examination, and Dropped	3.69

QUALITY-POINTS

A	1,314	Total hours carried	5,035
B	2,848	Total hours passed	4,865
C	2,389	Total hours failed	170
	6,551	Total courses carried	1,644
Less F	170		
Total points earned	6,381		

Average per hour	1.267
Average per course	3.881
Average per student	18.712

E

SENIOR CLASS
 SPRING SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	170	10.99
B	597	38.59
C	596	38.52
D	122	7.89
F	19	1.23
Incomplete .. 14)	<u>43</u>	<u>2.78</u>
Absent 7)		
Dropped 22)		
	<u>1,547</u>	<u>100.00</u>

Percentage passing grades	95.99
Percentage failing grades	1.23
Percentage Incomplete, Absent from Examination, and Dropped	2.78

 QUALITY-POINTS

A	1,527	Total hours carried	4,467
B	3,506	Total hours passed	4,405
C	1,777	Total hours failed	62
	<u>6,810</u>	Total number courses	1,504
Less F	<u>62</u>		
Total points earned	<u>6,748</u>		

Average per hour	1.510
Average per course	4.486
Average per student	21.697

F

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS
 UNDERGRADUATE MEN OF TRINITY COLLEGE
 SPRING SEMESTER—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	633	8.26
B	2,064	26.95
C	3,212	41.93
D	1,147	14.97
F	444	5.80
Incomplete .. 60)	<u>160</u>	<u>2.09</u>
Absent 54)		
Dropped ... 46)		
	<u>7,660</u>	<u>100.00</u>

Percentage passing grades	92.11
Percentage failing grades	5.80
Percentage Incomplete, Absent from Examination, and Dropped	2.09

QUALITY-POINTS

A	5,886	Total hours carried	23,471
B	12,692	Total hours passed	22,017
C	10,034	Total hours failed	1,454
	<u>28,612</u>		
Less F	1,439	Total courses carried	7,500
	<u>27,173</u>		
Total points earned	27,173		
Average per hour	1.157		
Average per course	3.623		
Average per student	17.296		

G

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS

UNDERGRADUATE MEN OF TRINITY COLLEGE

CLASS AVERAGES—SPRING SEMESTER

1938-39

Freshman Class	1.013
Advanced Freshman Class .....	.252
Sophomore Class	1.214
Junior Class	1.267
Senior Class	1.510
Undergraduate Men, Trinity College	1.157

A STUDY OF THE DISTRIBUTION OF GRADES AND QUALITY-POINTS

UNDERGRADUATE MEN OF TRINITY COLLEGE

YEAR—1938-39

<i>Grade</i>	<i>Number</i>	<i>Percentage</i>
A	1,225	7.77
B	4,102	26.00
C	6,561	41.60
D	2,429	15.40
F	1,104	7.00
Incomplete . 140	352	2.23
Absent 120		
Dropped .. 92		
	<u>15,773</u>	<u>100.00</u>
Percentage passing grades	90.77	
Percentage failing grades	7.00	
Percentage Incomplete, Absent from Examination, and Dropped	2.23	

QUALITY-POINTS

A	11,511	Total hours carried	48,456
B	25,278	Total hours passed	44,852
C	20,600	Total hours failed	3,604
	<u>57,389</u>		
Less F	3,589	Total courses carried	15,421
	<u>53,800</u>		
Total points earned	53,800		

Average per hour	1.110
Average per course	3.488
Average per student	16.713

TABLE 8

FRATERNITY AVERAGES

YEAR—1938-39

FALL SEMESTER

Fraternity Average	1.253
Nonfraternity Average .....	.955
All Men's Average	1.052

SPRING SEMESTER

Fraternity Average	1.291
Nonfraternity Average	1.015
All Men's Average	1.145

SUMMARY FOR THE YEAR

Fraternity Average	1.275
Nonfraternity Average .....	.981
All Men's Average	1.097

COUNSELING

As in past years members of this Staff and others associated with it have spent all available time in student counseling. It is not possible to give in a brief report an adequate résumé of the work undertaken unless one were to list the cases interviewed, giving brief histories and suggestions made. We are constantly aware of the many opportunities to assist our students in academic questions, personal and health problems, vocational guidance. In our effort to expand our facilities for personal relations and counseling, a larger number of those qualified and available are devoting time to this work. The need for plan and organization in counseling and personnel work in general is obvious, but we are ever mindful that effective work with the individual depends upon the ability and personal effectiveness of the adviser.

EXTRACURRICULAR ACTIVITIES

In earlier reports I have striven to emphasize our conviction that extracurricular organizations must be judged by their contribution to education and citizenship. The following excerpt from the Student Activities report of the year by Mr. W. M. Upchurch, Jr., expresses briefly, I believe, the attitude in which we seek to work with these organizations. "Usually students want to do for themselves, although they seem anxious to have guidance if it is tempered with human understanding and skill."

During the year approximately eighty student organizations were affiliated directly or indirectly with the Student Activities Office. Twenty-four organizations carried on their financial activities in full through this office. From July 1, 1938, to July 1, 1939, the sum of \$33,158.70 was deposited with the student activities fund, and a total of \$31,780.97 was withdrawn. At the end of the year these organizations had on

deposit with the University Special Activities Fund or in special trust or savings funds a total of \$14,826.85. This amount has been gradually increasing during the past five or six years. Prior to that time none of the organizations, included in the total given above, had cash balances at the end of the year or sinking funds. (These totals do not include publications funds; these funds are deposited directly through the Treasurer's Office.)

Approximately \$10,000 was disbursed through this office in buying furnishings and needed supplies for activities. This assistance was made possible by the co-operation of the Purchasing Department with the Activities Office.

Reference to Table 8 will show that social fraternities were above the all men's average in scholarship. The rating regularly achieved in recent years is in a large measure attributable, I believe, to the requirement of a "C" average in the first semester for pledging and to the plan of deferred rushing. It is becoming increasingly apparent that fraternities throughout the country must re-emphasize with renewed fervor their basic teaching of scholarship and character if they are to maintain themselves as serviceable institutions. With adequate living accommodations at moderate rates, interested and effective advisers, in the main, and good leadership in the Panhellenic Council, our fraternities are in a favored position to direct their efforts to those worthy ends for which they were founded.

Plans for the installation of a chapter of the Beta Theta Pi Fraternity by colonization are now well under way, and should be completed before the end of the year. The initiation into the Chi Phi Fraternity of a group to lay plans for the revival of the old Mu chapter has been completed, and the return of Chi Phi to the campus before the end of the year is expected.

SUMMARY

A study of the scholastic records for the year, attendance reports, health records, disciplinary records, activities of the musical, dramatic, debating, and intramural and intercollegiate athletic teams, and other similar groups indicates a year of progress. It is especially fitting here to call attention to the co-operation of the student body in the programs of the Centennial Year.

H. J. HERRING,
Dean of Men.

THE FRESHMEN

I herewith submit my report on the work of the Freshman Office for the year 1938-39.

The discrepancy between ability and achievement mentioned in the report of last year again is evident in the record of the Class of 1942. For contrary to the firm belief in the potential ability of the class held by those most closely associated with it, the record of the past year was somewhat disappointing. Although the quality-point earnings per student in the spring semester showed marked improvement, the year's

average ranked this class below those of 1933-34, 1937-38, and 1934-35 in the order named.

The very superior scholastic record of the fraternity element deserves mention. Of the 491 Freshmen who completed the first semester, 181 pledged fraternity during the spring. These one hundred and eighty-one averaged 25.82 quality-points per man; the three hundred and ten who were not eligible to, or if eligible did not join a fraternity, averaged 8 quality-points. In June, however, the one hundred and eighty-one fraternity freshmen averaged 22.5 quality-points, a loss of 3.32 quality-points per man; the two hundred and seventy-eight nonfraternity men who completed the year averaged 11.42 quality-points, a gain of 3.42 quality-points per man. For the year the class average was 15.03 quality-points per man; the fraternity element 24.15 and the nonfraternity 9.92.

Despite the excellent record of the Freshmen who affiliate with fraternities, this office is concerned over the average loss in the spring semester incurred by those men who accept invitations to membership in one of the eighteen social fraternities. The experience of the present class is no exception; at no time since deferred pledging was instituted with the consequent opportunity of comparing the scholastic work of freshmen before and after affiliation has the fraternity element held to the scholastic average won in the fall semester. Individual cases show gain at times and the fraternity average in the spring is still gratifyingly high; and yet the average loss is a problem which requires attention.

This office is also keenly interested in the question of so-called "associates," men without the necessary scholastic average to permit formal pledging who nevertheless associate in some more or less formal fashion with a fraternity. The University does not recognize the validity of such affiliation, nor is there sanction for it in the constitution of the Panhellenic Council. Very few of these associates ever achieve the average necessary for pledging nor, in the opinion of this office, do they contribute in any way to the welfare of the fraternity. The associates themselves are influenced by the more distracting phases of fraternity life without being in a position to feel the pressure exercised on the membership by the more constructive elements of leadership. It is hoped that the fraternities themselves will realize the futility of the practice.

Under the able direction of Donald V. Hirst and William R. Nesbitt the Freshman Advisory Council entrenched itself more firmly on the campus. Membership was increased from twenty-three to sixty-three upperclassmen and graduate students, of whom thirty-four were fraternity men. The membership was chosen on a basis of character, scholastic ability, and campus reputation. The Council was withdrawn from the Y.M.C.A.; henceforth it is to be sponsored and financed jointly by the Men's Student Government Association, the Men's Panhellenic Council, and the Y.M.C.A. The active supervision lies in the hands of an executive committee consisting of the chairman of the Council, the chairman of the freshman housemasters, and the Director of Religious Activities; general supervision rests in the Governing Board composed of the Dean

of Freshmen, the past chairman of the Council, the executive committee, and the presidents of the Student Government, of the Panhellenic Council, of the Y.M.C.A., and of the Freshman Class. A training class for next year's advisers was offered by Dr. K. B. Watson in the late spring, and a handbook to be used by members of the Council is in preparation.

The Council thus has evolved a sound and effective organization; it is now incumbent upon it to render the service which will validate its existence on the campus.

In the course of the past year the sophomore honorary fraternity, B.O.S., reorganized its procedure, modifying radically its initiation ceremonies and clarifying its practices and objectives. Due largely to the more careful selection of membership and a more efficient method of election of officers, the body now has saner and more effective leadership. The character of the organization has undergone a significant change in the last few years.

The co-operation which this office has received from the Supervisors of Freshman Instruction continues to prove advantageous in facilitating contact with the several departments and in promoting ease and efficiency in matters touching the welfare of Freshmen. Relations with the Panhellenic Council and officers of individual fraternities remain cordial and the Y.M.C.A. renders its usual yeoman service, particularly during Freshman Week. And the general social life of the campus still demands considerable attention.

ALAN K. MANCHESTER,
Dean of Freshmen.

THE WOMAN'S COLLEGE

To the President of the University:

As Dean of the Woman's College, I have the honor to submit the following report for the year 1938-39. In the main it is a summary of reports made to the Dean by members of the Staff, with such comments as seem pertinent.

The total enrollment remained approximately the same as for the preceding year, 857 for the first semester and 866 for the year. Since for some years it has been the policy to admit no more undergraduates than can be accommodated in the dormitories, except for those living with near relatives in town, this number with slight variations represents the probable annual enrollment. The following tables show the distribution according to class, state, and religious affiliation.

TABLE 1
ENROLLMENT BY CLASSES

Seniors	171
Juniors	169
Sophomores	219
Advanced Freshmen	25*
Freshmen	253
Specials	29
<i>Total</i>	<hr/> 866

TABLE 2
GEOGRAPHICAL DISTRIBUTION OF UNDERGRADUATE WOMEN

Alabama	5	Mississippi	4
Arkansas	6	Missouri	1
California	1	New Jersey	83
Colorado	1	New York	82
Connecticut	16	North Carolina	244
Delaware	14	Ohio	39
Florida	42	Oklahoma	4
Georgia	28	Pennsylvania	77
Illinois	16	South Carolina	15
Indiana	4	Tennessee	15
Iowa	2	Texas	3
Kentucky	11	Utah	1
Louisiana	2	Vermont	2
Maine	5	Virginia	47
Maryland	26	West Virginia	19
Massachusetts	8	Wisconsin	4
Michigan	12	District of Columbia.....	17
Minnesota	5	Foreign Countries and	
		U. S. Dependencies	5
<i>Total</i>			<hr/> 866

* Includes only those who were Advanced Freshmen the entire year. Those who attained sophomore standing at the end of the first semester were included in the Sophomore Class.

TABLE 3

RELIGIOUS DISTRIBUTION OF UNDERGRADUATE WOMEN

Assembly of God.....	1	Moravian	2
Baptist	52	Presbyterian	165
Catholic	33	Quaker	3
Christian	6	Reformed Church	11
Christian Scientist	7	Unitarian	3
Congregational	33	United Brethren and	
Episcopal	137	Associated Groups	2
Evangelical	3	United Presbyterian	5
Hebrew	19	Non-sectarian or Protestant.....	1
Lutheran	26	No Church Affiliation.....	88
Methodist	237	No Data	32
<i>Total</i>			866

As in former years the majority of the students were from the South. The percentage, 56.24, was slightly lower than the 58 of last year. The number enrolled from the West showed a small increase. Again by far the largest number from any one state were from North Carolina, a total of 244 or nearly 28 per cent of the total enrollment, of whom 106 were from Durham, an increase of 8 over the enrollment of 1937-38.

The number of new students was 305, not including special students, of whom 253 were Freshmen and 52 were transfers with advanced standing. This shows a decrease of 29 as compared to 1937-38, accounted for by the fact that our rooms had been entirely filled in the preceding year and that therefore we had available only the rooms left vacant by the Seniors and by other students not returning.

As in the preceding year the number of applications increased. A total of 2,155 requests for application blanks were received; 1,793 blanks were mailed; the remaining 362 requests came after the rooms were filled and a waiting list set up, and therefore no blanks were mailed. The procedure in dealing with applications was similar to that of former years, with a greater reliance upon interviews. More prospective students and their parents visited the College, Dean Persons made an additional trip to the North in February for that purpose, and there was a notable increase in interviews held by selected alumnae through the South and Middle West.

An innovation in policy which seems to have had excellent results was to admit tentatively in the winter or early spring those whose school records and whose qualities of character, personality, and health were exceptionally good as judged by recommendations and personal conferences. By receiving such a notification of acceptance, a promising applicant makes her decision early and is less likely to withdraw if accepted by another college. The small percentage of withdrawals among those thus tentatively admitted as compared with the percentage for the entire group justifies, we believe, an extension of this plan.

To choose wisely the few whom we can accept among the rapidly increasing number of applicants involves much time and careful consideration on the part of the members of the Committee on Admissions and necessitates an expanse in the office personnel, but in no other way do we believe that we can do justice to both applicants and College.

The new students came from 32 states—73 from North Carolina, much the largest number from any one state, and 56 per cent of the whole from the South.

Most of the Freshmen entered from public high schools. Thirty-two had all or a part of their preparation in private schools. All of these were admitted upon the basis of their school records, recommendations, and personal interviews. Special attention was given to the results of intelligence tests given in the schools and of the College Aptitude tests taken by some of the applicants. For the first time in the history of the Woman's College no Durham girl was required to take entrance examinations.

The advanced students came from widely scattered institutions: 32 from four-year colleges and universities, 17 from junior colleges, and 3 from technical and professional schools. Eight former students returned to complete their work at Duke. Two of these had taken their junior year at the Sorbonne in Paris.

The following tables give class, regional, and religious distribution of the new students.

TABLE 4

CLASSIFICATION OF NEW STUDENTS

Freshmen	253
Advanced Freshmen	2
Sophomores	22
Juniors	26
Seniors	2
Specials	4
<i>Total</i>	309
Resident Students	273
Day Students	36
<i>Total</i>	309

TABLE 5

REGIONAL DISTRIBUTION OF NEW STUDENTS

Southern	173	Middle West	35
Middle Atlantic	87	Far West	1
New England	13	Foreign Countries	0
<i>Total</i>	309		

TABLE 6

RELIGIOUS DISTRIBUTION OF NEW STUDENTS

Baptist	21	Lutheran	9
Catholic	15	Methodist	86
Christian	2	Presbyterian	76
Christian Scientist	3	Quaker	3
Congregational	15	Reformed	6
Episcopal	54	Unitarian	2
Evangelical	1	No Affiliation	6
Hebrew	10		
<i>Total</i>	309		

On the whole the scholarship record was slightly lower than last year. There was some improvement in the work of those called Advanced Freshmen, perhaps due to the fact that, for the first time, they had a special adviser, Miss Seabolt. There was a slight improvement also in the work of the Sophomores and Seniors, but the work of the Freshmen and Juniors was distinctly less good.

The following table shows the yearly average by classes.

TABLE 7
CLASS YEARLY AVERAGE

<i>Class</i>	<i>Q.-Pts. Earned Per S.H. Carried</i>	<i>Q.-Pts. Earned Per Student</i>	<i>S.H. Carried Per Student</i>	<i>S.H. Passed Per Student</i>	<i>S.H. Failed Per Student</i>
Freshman.....	1.160	18.24	15.72	14.97	.75
Advanced Freshman.....	.65	9.92	15.15	13.05	2.10
Sophomore.....	1.461	22.42	15.34	14.98	.36
Junior.....	1.598	24.32	15.21	14.98	.23
Senior.....	1.862	27.04	14.52	14.49	.03
Special.....	.99*	5.11	5.16	4.29	.87
<i>Total.....</i>	1.433	21.55	15.04	14.57	.47

The general average would be much higher if it were not for the Advanced Freshmen. The total number of students, not including specials, who failed to make a "C" average was 200, or 23 per cent, distributed as follows: 107 Freshmen, or 42 per cent; 31 Advanced Freshmen, or 63 per cent; 45 Sophomores, or 20 per cent; 15 Juniors, or 9 per cent; 2 Seniors, or 1 per cent. The large percentage of Advanced Freshmen whose work is unsatisfactory accounts for the large number of withdrawals among this group at the end of the second year. Four failed to pass the required amount of work to remain in college, and 18 others dropped out at the end of the second semester, a total mortality of 45 per cent. The withdrawals from all classes occurring from September, 1938, to September, 1939, numbered 101, or 15 per cent. This does not include special students (29), Seniors who graduated in June (171), and transfers to other schools within the University (Nursing 2, Law 1).

The following tables give the number of withdrawals according to classes and the reasons as far as could be ascertained.

TABLE 8
WITHDRAWALS ACCORDING TO CLASSES

Freshmen	36 or 10%	(In class of 253)
Advanced Freshmen	21 or 45%	(In class of 46)
Sophomores	31 or 15%	(In class of 208)
Juniors	10 or 6%	(In class of 169)
Seniors	3 or 1.5%	(In class of 171)
<i>Total</i>	101 or 15%	(Total of 663)

TABLE 9

REASONS FOR WITHDRAWAL

Transferred to Other Liberal Arts Colleges.....	32
Transferred to Business and Professional Schools.....	11
Unsatisfactory Scholarship	39
Dropped for failures.....	9
Withdrew voluntarily	10
Contributory factor (included in other causes).....	20
Financial	5
Health	5
Discipline	4
Marriage	9
Maladjustment	1
Working	1
Needed at Home	2
Unknown	12
<i>Total</i>	<u>101</u>

Unsatisfactory scholarship was the most frequent cause and often the real reason, though some other may have been given by the student. This was especially true of those transferring to other institutions, although some transferred because of vocational interests which could not be satisfied here and a few who felt that their Freshman or Sophomore work was not sufficiently stimulating.

Studies made by Mrs. Persons, Dean of Freshman Women, throw some light upon the problems of freshman adjustment. Almost all of the Freshmen had taken a straight college preparatory course and presented fifteen or more units in regular academic subjects. According to reports from the schools attended, 22 were valedictorians, 209 ranked in the first quarter of their class, an additional 11 in the first third, and only 4 out of the whole number admitted were in the lower half of their class. The great majority had been leaders in their schools, interested in many activities as well as in good scholarship. Practically all were supposed to have real intellectual interests and ability. And yet their scores in the psychological test given during Freshman Week varied widely.

The following statistics will give some idea of the academic achievements of the class: 4 students won three of the five annual competitive scholarships awarded Freshmen; 18 students earned the right to membership in Ivy; and 9 students made Freshman Honors at Commencement.

TABLE 10

FRESHMEN EARNING A "B" AVERAGE

	<i>No. of Students</i>	<i>Percentage of Class</i>
Fall Mid-Semester	24	9.5
First Semester	33	13.3
Spring Mid-Semester	26	10.5
Second Semester	29	11.7

TABLE 11

FRESHMAN FAILURES

	<i>No. of Students Failing</i>	<i>No. of Courses Failed</i>	<i>Percentage Failing One or More Courses</i>
Preliminary Grades—October 28.....	73	94	29
Fall Mid-Semester	46	56	18
First Semester	45	53	18
Spring Mid-Semester	40	48	16.1
Second Semester	43	56	17.4

Mrs. Persons's comments on the situation are so well considered that I wish to quote them in full:

"The noticeable decrease through the year in the number of students failing courses was undoubtedly due in large measure to the concerted effort made by the advisers to encourage Freshmen to spend more time in study. It is regrettable, however, that this decrease in failures did not extend to other low marks; for at the end of the year it was found that 70, that is 27 per cent, of the Freshmen had failed to make Sophomore Class standing. Such a percentage is far too high and it is hoped that the plan of deferred rushing which is now assured and the more efficient guidance of the advisers under an expanded program of student counseling may greatly reduce it in 1939-40.

"Upon examining all of the above figures, it will be seen immediately that there was a wide variety of ability, preparation and achievement represented in the Class of 1942. The problem of adapting the first year of college work to such a heterogeneous group is a difficult one. While many of them come from excellent public schools where they have been encouraged to do independent thinking and studying in small classes under expert guidance, others have come from small rural high schools where preparation is the minimum, classes are crowded, and both the academic year and the high-school term are short.

"This fact makes it important that the work be varied and elastic. The College can ill afford to lose its best students because they do not find their courses sufficiently challenging. Nor can it fail to assume the responsibility of giving special help to the weak ones who find minimum assignments excessive. The solution of the problem, it seems to me, may come: first, in more discrimination in sectioning students; secondly, in the introduction of advanced work in certain fields for students whose elementary training has been above average; thirdly, in the further use of qualifying examinations for wiser placing of students (such as an examination in modern European history to satisfy the prerequisite for further study in the field); and, above all, in the wise selection of freshman instructors, men and women whose personalities are stimulating, whose presentation of subject matter is convincing, and who will be interested in and keen to note the brilliant student, encouraging her to do independent work, while maintaining an understanding attitude toward the average and mediocre student.

"Several noteworthy changes have been made recently which have improved the situation. To meet the demand for the teaching of language

courses in the native tongue, sections of second- and third-year French were taught in French this year for the first time. Qualifying examinations for advanced work in French, Spanish, and German have been instituted. The English Department has for several years formed special sections for its better prepared and ablest students. This year two small seminars of fifteen students each were organized for more advanced instruction. These classes have been most enthusiastically enjoyed. The History Department made a beginning in the same direction when two professors of freshman sections selected at mid-semester the five best students from their classes and organized an informal seminar group which met for an extra hour each week. This method of instruction proved to be an excellent means of stimulating the best efforts of the ablest students, many of whom were already beginning to find work dull in a course geared to the average student. In mathematics the courses on the freshman level were planned with the idea of meeting the needs of students who wished to major in particular fields and were selected with the major in mind. If the academic emphasis is to be paramount in the future, it is urgent not only that facilities for individualized instruction be increased but that all departments recognize the importance of selecting for freshman instruction their most successful teachers.

"Thirty-six Freshmen, or 14 per cent of the class, withdrew from the College during the year or failed to return in September. In most cases a number of factors contributed to the student's decision to leave, among which a lack of thorough adjustment here and poor scholarship were general. The outstanding reasons as given by the students themselves are summarized as follows:

TABLE 12
REASONS FOR WITHDRAWAL OF FRESHMEN

Unsatisfactory Scholarship	10
Dropped for failures.....	3
Withdrew voluntarily	7
Transferred to Other Liberal Arts Colleges.....	13
Transferred to Business and Professional Schools.....	2
Financial	1
Discipline	2
Marriage	1
Home Conditions	2
Unknown	5
<i>Total</i>	<hr/> 36

"It is significant that of those who did not return 58 per cent had not made as much as a "C" average. A change of college was recommended for 18 students whose work had been very poor. Only 5 of these made a change, however, and a number of those who withdrew without such recommendation had a better chance of carrying the work here successfully.

"The policy of giving special aid to those Freshmen whose psychological test scores were low was continued. As a result of the increasing demand for an orientation course for all Freshmen, the office sponsored

for the first time a series of six lectures relating to that topic for those not enrolled in Education 1. Mr. Watson, who was very generous with his time this year, has agreed to develop the plan still further in the future and to enlist the assistance of the Freshman Advisers in an effort to apply his suggestions to individual problems.

"The long felt need of expert guidance for Freshmen in matters of personal hygiene has been met very effectively for the past two years through a series of lectures and discussions led by Dr. Thomas. During 1938-39 each of the seven lectures was given four times so that the group of students would be small enough to encourage questions and a frank discussion of problems. The skill with which Dr. Thomas conducted these discussions and the enthusiastic response of students to her offer of individual conferences make the wisdom of the continuance of such a plan self-evident."

The slightly lower academic record of the Freshmen was not unique. The number of women making the Dean's List was 69 for the first semester, 157 for the second semester, a total increase of 6 over last year, but only 22 women made class honors, 8 less than last year. Fifteen were elected to Phi Beta Kappa, as compared with 22 in 1937-38, and the number awarded honorary scholarships was the smallest in several years.

A study of the records of transfer students made by Mrs. Smith is, on the other hand, encouraging. The mortality rate for those transfers admitted in 1939 shows decided improvement over previous years, being 19 per cent as compared with 32 per cent in 1937, while only 25 per cent failed to make a "C" average, as compared with 30 per cent in 1937.

Throughout the year the Dean and her Staff were concerned with means to improve the scholarship of the women students. The Freshman Advisers and a committee of Faculty, Staff, and students had recommended in the spring of 1937 that certain changes be made in Freshman Week and in the weeks following and that rushing be deferred. As many as possible of these suggestions were put into effect, but the Panhellenic Council was opposed to deferred rushing and it seemed an inopportune time to present the matter. In 1938-39 it was brought before the Woman's College Government Association by a group of influential senior women and, after much discussion, a recommendation presented by Panhellenic for deferring all rushing until the second semester was adopted by a large majority. It is hoped that this and other measures adopted by the Faculty and Staff may create more favorable conditions for the best development not only of the Freshman Class but of every student.

It is possible that one reason for the slightly lower academic record for 1938-39 may have been the many events connected with the Centennial Celebration. These took the time of many of the Staff and Faculty, as well as of some of the students, and so much was presented in the way of music, lectures, and special occasions that the students may have given less attention to their daily work.

The occasion of special note to the Woman's College was the Woman's Symposium, on Women and Contemporary Civilization, held during the spring holidays in connection with Alumnae Week-end. Under the very able leadership of Professor Katharine Gilbert many women worked together to make this symposium one of real significance to the College, the University, the alumnae, and the distinguished guests who came from far and wide. In this the women had the cordial support of the special committee on Centennial Symposia and of the officers of the University, as well as that of various women's organizations in the state. The attendance was large, the speakers of national and often of international reputation, the subjects discussed of vital interest, and the details of entertainment were so carefully worked out beforehand that everything went without confusion. To all those who worked so happily together the College owes a deep debt of gratitude.

Certain other phases of our college life deserve special mention in this report. The interest of the students in the College again manifested itself in various practical ways. The Woman's Athletic Association held a hockey conference at the College, inviting women from neighboring institutions to play under the direction and criticism of Miss Constance Applebee, an internationally known player. For the first time, also, the Association held a golf tournament. Those interested in the dance had an exceptional opportunity of working for some hours with Miss Hanya Holm, who had given a combined lecture and dance program during the symposium and who remained for two days in order to work with our students. These are but part of the well-considered program of the Department of Physical Education, whose interest and enthusiasm, Dean Wilson says, have also been most helpful in developing a well-rounded and varied social life.

Again the Woman's College Forum, with money provided by a tax of one dollar on each student voted unanimously by the Woman's College Government Association, brought interesting people to the College: Edna St. Vincent Millay, Maurice Hindus, Dr. No Yong Park, and Mr. Minakuchi. The Music Study Club sponsored the concert by Adolph Busch and Rudolf Serkin.

The Social Standards Committee helped to improve the Union by providing new draperies, Venetian blinds, and several new pieces of furniture; the Sandals redecorated the Ark and improved the lighting system there; the Student Government Association bought a new rug for the Student Council Room; the "Organ Fund" received contributions from various groups. The Class of 1939 presented as its senior gift a set of Westminster chimes and an amplifier to the campus. The Panhellenic Scholarship of one hundred dollars, awarded annually to the member of the Senior Class who makes the best scholastic record during her junior year and the first half of her senior year, was given to Susan Phillips, of Chattanooga, Tennessee.

There were many other less tangible ways also in which the women played a vital part in our college life. Only a few can be mentioned here. Miss Rose Kueffner and Miss Beatrice Abernethy helped to bring together

more closely the women in the Town Girls' Club. Under the presidency of Miss Lucille Burgess, the Y. W. C. A. was most active. It co-operated with the Y. M. C. A. in bringing to the campus Mrs. Mildred Morgan for a series of conferences on Marriage and Family Affairs, and in continuing these conferences under Dr. and Mrs. Hornell Hart. The Y. W. C. A. Social Service Committee helped regularly in several causes in Durham. Perhaps this can best be shown by quoting from the annual report of the president:

"This committee attempts, in a tangible way, to fulfill especially that part of the Y. W. C. A. purpose which has to do with making a full and creative life possible for others. This committee has more people participating in it than any other committee. The work this committee does is of help to the development of the girls who work on it, to the people with whom they work, to those who manage welfare and other social agencies in town; and it gives social service majors an opportunity to get experience in that type of work.

Sub-Committees:

- A. Hospital Committee
 - a. Reading to children at Duke Hospital in the children's ward (35 girls).
 - b. Watts Hospital Clinic (30 girls).
 - c. Duke Hospital Clinic (40 girls)
 - d. Spastic Clinic of Duke Hospital
- B. Family Welfare Committee
 - a. Went to Durham Nursery each day.
 - b. Went to Wright's Refuge each day.
 - c. Collected money for, bought food, filled and delivered to Family Welfare Society, nine Thanksgiving baskets filled with food for Thanksgiving dinner and staples.
 - d. Names of 100 needy children were secured from the Welfare Society. Toys and clothing were bought for their Christmas.
 - e. Sponsored a lecture for the benefit of the Durham Nursery School on March 8.
- C. Social Committee
 - a. Gave a party at the Nursery School.
 - b. Gave a party at Wright's Refuge.
 - c. Gave a party at King's Daughters.
 - d. Gave a Christmas entertainment in the Ark for children from the Nursery School. Games were played and toys were distributed.
- D. Legal Aid Committee
 - a. Committee on case work. The members assisted the Legal Aid Clinic by investigating cases.
 - b. The committee investigated departments in the City Building of Durham. Saw the Fingerprinting Bureau and became acquainted with its workings.
 - c. Legal classes division. The special work of this committee was to attend classes every Wednesday afternoon.

In addition, the students gave Thanksgiving baskets to poor families, Christmas parties and gifts to less fortunate children, and contributed 460 garments and \$4.00 to the Durham Needlework Guild.

In all of these and many other activities, social, charitable, religious, and academic, the students have the invaluable interest and help of the

heads of houses, administrative officials, and some of the Faculty. The latter are especially helpful during the election of the officers of the College Government Association. Our method of election, which involves a kind of civil service examination for the more important offices, has attracted attention elsewhere. Dr. Holton, who has for years assisted the students, read a report of this system at the recent meeting of the Association of Women's Colleges of the South in Memphis, Tennessee. It is perhaps partly owing to interest in this method of election, as well as to the character and personality of the women themselves, that Miss Betty Jean Brown, of Blanchester, Ohio, president of our Student Association in 1938-39, was elected president for the same year and graduate adviser for 1939-40 of the Southern Intercollegiate Association of Student Governments, and Miss Peggy Ann Raup, of Richmond, president-elect of our Association for 1939-40, was elected secretary of the Southern Association for the same year.

One of our long-cherished dreams came true in 1938-39. This was the appointment of Miss Florence Moss of the Class of 1932 as director of religious activities on our campus. Miss Moss was interested in Y. W. C. A. work in college, as a teacher has had experience with young people, and has kept in close touch with the College and University. She is vitally interested in the spiritual life of college students and has the qualities to win their liking and confidence. She has served ably as adviser to the Y. W. C. A., as a member of the Board of the Duke University Church and of the Student Religious Council, and as a friend and counselor to the students. Among other new plans, she inaugurated a series of vesper services held three times a week during Lent, services in the planning of which some forty girls co-operated.

The Dean is frequently asked questions by members of other institutions concerning the Personnel Office of the Woman's College. We have no Personnel Office as such, but all of us working with students are doing personnel work, each in her own field, and we are co-operating by frequently meeting together and by calling one upon the other for special help. This somewhat informal method may not always be as efficient as a more formally ordered office with a special personnel director, but what it loses in efficiency it gains in the responsibility, initiative, and warm interest of each individual, and in the absence of any consciousness of mechanism in our work with our students. It necessitates, of course, an unusually able group of women serving as heads of houses and in other capacities. Fortunately we have been able to keep the most of our Staff from year to year. The addition in 1937-38 of Dr. June Thomas as resident physician and of Miss Moss in 1938-39, both of whom share in our personnel work, has made us better able than in former years to meet the needs of the individual student.

To the regret of the College, Miss Mary Meade, for two years head of Aycock House, resigned to become counselor and instructor in mathematics at Alabama Polytechnic Institute. In her place was appointed Miss May Freeman, a graduate of Randolph Macon Woman's College, who has taught English for some years in the Charlotte City Schools.

The College needs to develop better opportunities for vocational guidance and better ways of giving our students a realization of the qualities demanded in the business and professional life into which many will enter. Each year we are having more requests for such guidance from our students, their parents, and our alumnae. Dean Wilson reports that some of the alumnae think the Duke graduates lack the practical preparation and discipline needed for occupational success. We have already taken some steps in this direction, but to do it well requires special training, much time, and the wisdom of experience. It may be necessary in the near future to appoint an adequately trained member of the Staff for this especial purpose.

There is one subject of interest to the whole University in which the Woman's College seems especially concerned, the development of work in the arts. For several years we have had an increasing number of would-be applicants who want to major in music or to study music. It is with special satisfaction that we note the addition in 1938-39 of Mr. Henry Bruinsma and the appointment for 1939-40 of Miss Julia Wilkinson as instructors in this department. The growth of interest during 1938-39 was marked and doubtless will continue in the coming year. As soon as possible this department should be so organized as to be able to offer a major in this field.

The proof of the pudding is in the eating and the worth of a college is measured by the lives of its alumni. In this respect the Woman's College is fortunate. Not only are the older alumnae of Trinity College able and useful women, but many of the younger alumnae, who have graduated since the organization of the Woman's College, are already winning success in their business or profession, are taking positions of leadership in their communities, and are making happy homes. In this Centennial Year the women are glad to think they have contributed something of value to the traditions and to the influence of the University.

Alice M. Baldwin,

Dean.

THE COLLEGE OF ENGINEERING

To the President of the University:

I have the honor of presenting the following report of the Division of Engineering for the year 1938-39.

The Division of Engineering was developed in 1936-37 out of the Departments of Civil, Electrical, and Mechanical Engineering. In the spring of 1939 the College of Engineering was organized. Since the organization of the Division of Engineering two years ago, a very decided change has taken place in the morale of our Faculty, students, and alumni. All of us are now of the opinion that our facilities are on an equal footing with those of the other branches of the University, and that the equipment of our three engineering departments will compare very favorably with that of any other institution in the country, so far as undergraduate instruction in Civil, Electrical, and Mechanical Engineering are concerned. Since the formation of our Division, adequate funds have been available for the development of our laboratories and the improvement of our physical plant in general.

The Civil Engineering Department is housed in Bivins, and, since this building has been completely renovated and remodeled, adequate laboratory and classrooms have been provided. The major capital expenditures for this department during the past two years have gone towards the development of the Soils, the Advanced Stresses, and the General Materials laboratories, as well as to additions to the surveying equipment. Funds were also provided for the Bituminous and Sanitary laboratories in so far as they were needed.

The Electrical Engineering Department Laboratory revisions have been continued as contemplated. The Electrical Machinery Laboratory is in the process of being entirely rearranged and has been prepared for remodeling and building renovations. An additional high-voltage laboratory is planned to be housed in the Annex. Negotiations are being made with the Duke Power Company for a 100,000-volt testing transformer and with the General Electric Company for 100,000-volt capacitors to be used in this laboratory. Through special arrangements with radio station WDNC, of Durham, two 100-foot steel radio towers are to be furnished the Department for use with our amateur radio station W4AHY. These are to be erected near the Engineering buildings. The Department was presented with \$525.00 for the purchase of a Field Intensity Meter to be used in the Radio Laboratory. Through a combination purchase and donation arrangement with the General Electric Company, a considerable number of new pieces of equipment have been secured for our laboratories for teaching purposes. This special group purchase was co-ordinated with the normal major capital expenditures made available to this department.

The Department of Mechanical Engineering is fully housed in Branson Building, which has been enlarged to provide a boiler-room, offices,

and other service space required by the department. The oil-fired boiler, which has a fully automatic burner and draft system, has been installed and is now providing steam for laboratory experiments. This boiler installation with its Prat-Daniel stack and deaerating feedwater heater, together with a number of other important pieces of new equipment, have added materially to the range of laboratory work of this department.

The curricula and schedule revisions which were authorized for the Division of Engineering last spring have, we think, accomplished several useful purposes; namely:

1. Reduced the number of afternoon laboratory periods sufficiently to permit engineering students to participate more fully in extracurricular activities. Heretofore our students have had as many as four full afternoons devoted to laboratory work; this has been reduced to one such period.
2. Provided sections of the same course for both semesters and thereby helped the student who fails on a course to make up his deficiency.
3. Made more effective use of classroom and laboratories by scheduling more classroom sections at the first periods in the mornings and afternoons and much laboratory work between ten and one in the mornings.
4. Increased the number of semester hours of Physics from ten to twelve so as to provide more adequate preparation in this basic science. Made six hours of Economics obligatory rather than optional.

The interest in engineering at Duke is evidenced by the increase in enrollment for the past few years. In the year 1936-37 the total enrollment in all branches of engineering was 144; for 1937-38 it was 167; and this year it is 201.

TABLE 1
GEOGRAPHICAL DISTRIBUTION OF ENGINEERING STUDENTS,
1938-39

1. North Carolina	55	14. Tennessee	3
2. New York	26	15. West Virginia	3
3. New Jersey	23	16. Alabama	2
4. Pennsylvania	19	17. Georgia	2
5. Connecticut	12	18. Cuba	2
6. Virginia	9	19. Vermont	2
7. Illinois	8	20. Canada	1
8. Massachusetts	7	21. Canal Zone	1
9. Ohio	6	22. Delaware	1
10. Michigan	5	23. Kentucky	1
11. South Carolina	4	24. Louisiana	1
12. Washington, D. C.	4	25. Mississippi	1
13. Maryland	3		
		<i>Total</i>	201

Southgate Dormitory, which houses the engineering students, has been remodeled so that excellent accommodations are now available for 158 students as well as providing adequate social and game rooms, gymnasium and dining hall facilities. Plans are being carried out by the Business Division of the University that will in a short while make this dormitory as attractive in all respects as the dormitories on the West Campus. If Southgate were enlarged to house the students the College of Engineering would be well equipped to take care of 225 men, and there is no thought of receiving more than that number.

From the standpoint of the student the past year was singularly successful. The quality of work to be expected of the average engineering student shows promise of considerable improvement as attested by the outstanding scholastic record of the Engineering Freshmen. Individual engineers distinguished themselves by winning membership in Phi Beta Kappa as well as in other honorary societies which represent specialized fields of study. To a greater extent than in the past our engineering students were well represented in the honor societies, whose membership is composed of students who have distinguished themselves in general student activities.

The engineering honorary organization, Delta Epsilon Sigma, functioned actively. As one of their projects, a committee from this group welcomed, either by letter or personally, every incoming Freshman before he arrived at the University. The same committee was present during Freshman Week to aid in the orientation program and, during this period, sponsored a "smoker" for the new men at which they were presented to the Engineering Faculty.

In keeping with a long-standing practice, the engineering students this spring presented their annual Engineers' Show, the chief purpose of which is to acquaint the public in general with the facilities for, and the character of, engineering instruction at Duke University. The 1939 Engineers' Show, which was sponsored and conducted by the student chapters of the American Society of Civil Engineers, American Society of Mechanical Engineers, and American Institute of Electrical Engineers, attracted not only local visitors, but also many distinguished engineers and interested visitors from other localities.

Over and above the usual local activities of the student chapters of the national engineering organizations, Duke students gained prominence through the presentation of several prize-winning papers at state and sectional meetings of these organizations. Under the sponsorship of the local chapters many prominent speakers were brought to the campus, and the student chapter of one of the national engineering societies took the initiative in the organization of a regional conference of all the student chapters in this society in the two Carolinas. In addition to their own local and sectional activities, the Duke student professional societies co-operated actively with other divisions of the University in the preparation of programs of common interest.

In student government activities a great step forward was made when a permanent representative was obtained by the engineers on the Council of the Men's Association. This had been an objective of the Southgate Council for a number of years, and its achievement gave rise to a feeling among the students that the engineers had obtained a more permanent niche in the life of the University. Particularly worthy of mention, also, are two phases of the Southgate Council's activities. In the first place, their co-operation with the Dean's Office and the Housemaster in Southgate was under all circumstances and in some difficult situations more earnest and active than is normally to be expected. In the second place, the Council has taken full responsibility for the monthly assem-

blies in Asbury Hall and has handled this matter most capably. Under the leadership of the Council, funds were raised by the students in Southgate so that, through the sympathetic co-operation of the Business Division, new furnishings have been provided for the recreation rooms of the building. This has made possible many successful social occasions. In several instances dinners and "smokers" have been held to which members of various divisions of the University and representatives of numerous professions were invited.

The revised schedule of classes has met with the enthusiastic support of the students, permitting as it does the participation of engineers in all phases of University life. Engineers were members of the band and the choir, and also claimed membership in the Young Men's Christian Association, and contributed regularly to the various University publications. Besides participation in varsity sports, the engineering students have been well represented in practically every type of intramural activity.

It is felt that during the past year still further progress was made toward making the engineering students of Duke University not only technically proficient, but also truly well-rounded men.

W. H. HALL,
Dean.

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

To the President of the University:

It was a happy coincidence which brought about the admission of Duke University into the Association of American Universities in our Centennial Year. Since one of the most important factors in admission of universities to the Association is the status of the Graduate School, the admission of the Graduate School to the Association is a gratifying recognition of its accomplishments during the period of its foundation under the leadership of its first Dean, Dr. W. H. Glasson.

During the year the construction of a large graduate dormitory to be known as Few Quadrangle with a capacity for five hundred and seventy-two students was being brought to completion. Not only bedrooms and studies for students are being provided for in the new dormitory, but social rooms as well. A separate dining room for graduate students in the Union was also in course of construction. Both the dormitory and the dining room in the Union will be ready for use by the beginning of the next academic year. The provision of comfortable and dignified living quarters for graduate students which this new construction provides is a source of great satisfaction to the Graduate School. The provision of office space for the Graduate School remains a problem of sharply increasing urgency.

The steady growth of enrollment in the Graduate School both during the regular session and during the summer session has given rise to concomitant problems. Just as in the case of undergraduate colleges, graduate schools are faced by the circumstance that great numbers of inadequately prepared students are anxious to enter. During the past year an effort has been made to devise means by which students who are not likely to be able to accomplish creditable graduate work may be prevented from undertaking a hopeless task. To this end admission to the Graduate School has been placed upon a probationary basis. During the first twelve hours of graduate work students are admitted to graduate courses but not to the Graduate School proper. Only after this probationary period has been satisfactorily completed is a selection made and those students whose records give promise of ability to do adequate graduate work admitted to the Graduate School.

Part-time students who are adequately prepared are welcomed to our courses, but it would not be a kindness to such students to allow them to believe that fragmentary work would enable them to complete the graduate study necessary for the Ph.D. degree. Measures have been taken to discourage the enrollment of prospective candidates for the Ph.D. degree whose program would be likely to allow only part-time work stretching over a number of years.

The language requirement has been strengthened by requiring the equivalent of three years of college work in one language or two years of college work in French and German for the A.M. degree in place

of the former requirement which was stated in terms of only one year of college work in two different languages.

The Graduate School is in need of an increase in the stipends paid to graduate scholars, fellows, and assistants in order that our Graduate School may be able to offer opportunities to graduate students substantially equal to those offered by the leading universities of the country. An increase in these stipends has been approved for the coming academic year. While this increase has been a modest one and further increases are urgently needed, it is nevertheless true that such increase must be gradual and very carefully administered. Not all departments are so equipped that they can be expected to offer appointments carrying larger stipends to graduate students. The quality of applicants varies from department to department and from year to year. It is extremely undesirable that appointments should be given to inferior applicants. Consequently, it is inevitable that the allocation of funds to departments should fluctuate from year to year. We must recognize that while more adequate stipends will attract better students, only when these better students are actually represented among our applications are we justified in granting increased stipends.

It is becoming always more evident that the quality of our graduate students would be improved by attracting a larger proportion of recently graduated seniors through offering a larger proportion of our stipends to such students. If our stipends are restricted to students who have done graduate work elsewhere, we are in serious danger on the one hand of losing the opportunity for participating in the first selection of the more promising graduate students and we are also in danger of obtaining men who would not be encouraged to continue their work at other institutions. The adoption of the policy suggested would have to be accompanied by the recognition that after the first year of graduate work numbers of students would not be encouraged to continue their graduate work further. These processes of selection might conceivably reduce the number of Ph.D. degrees conferred but would very likely materially improve the quality of the students upon whom these degrees are bestowed.

During the course of the year the plan of co-operation with the Graduate School of the University of North Carolina has been extended with particular reference to work in the Department of Sociology. Students studying for the doctorate in Sociology at one institution will ordinarily spend some time in residence at the other institution. A new course in Family Law, given by Dr. Bradway of the Duke School of Law, has been added to the list of courses in Sociology. The fuller co-ordination of the several graduate schools of Duke University is evidenced in a new course authorized for next year in Medical Sociology to be conducted by Dr. Bayard Carter and others of our Medical School Staff. Both of these courses have been designed to meet the needs of graduate students at the University of North Carolina as well as those of Duke University.

The work of a graduate school consists not only of teaching graduate students but also in the discovery of new knowledge by the faculty of the graduate school. Even the teaching which is done has for one of its major purposes the stimulation of research activity among graduate students and their instruction in the method of carrying on such research. Consequently, the record of the Graduate School is embodied in an important degree in the report of the Research Council, which shows the scholarly publications of the Faculty. The list of these publications is growing year by year. If it were feasible to have a list of the publications of those who have received the doctorate from Duke University, we should have a still more adequate measure of the contributions which the University is continuing to make to knowledge. While comprehensive data are lacking, we do know that this list also is growing.

STATISTICAL DATA ON THE WORK OF THE GRADUATE SCHOOL

TABLE 1

SUMMARY OF ENROLLMENT

Graduate students, Academic Year 1938-39.....	262
Graduate students, First Summer Term, 1938.....	1,074
Graduate students, Second Summer Term, 1938.....	463
Graduate students, Junaluska Summer School, 1938.....	7
Graduate students, Marine Laboratories, 1938.....	13
<i>Total</i>	1,819
Deduct for duplications.....	408
<i>Total enrollment</i>	1,411

Duke University conferred the degree of Doctor of Philosophy upon thirty-one candidates at Commencement in June, 1939. The distribution according to departments was as follows:

Biochemistry	1
Botany	3
Chemistry	6
Church History	1
Economics	1
Education	1
English	1
Forestry	1
History	4
Mathematics	1
Philosophy	3
Physics	3
Psychology	1
Sociology	2
Zoology	2
<i>Total</i>	31

The degree of Master of Arts was conferred upon ninety-four candidates at Commencement in June, 1939, with departmental distribution as follows:

Bacteriology	1
Botany	3

Chemistry	6
Economics	1
Education	18
English	16
Forestry	1
French	9
History	10
Latin	2
Mathematics	9
Philosophy	3
Physics	3
Political Science	5
Psychology	1
Religion	3
Sociology	3
Zoology	2
<i>Total</i>	94
Master of Education degrees, June, 1939.....	51

CALVIN B. HOOVER,
Dean.

THE SCHOOL OF RELIGION

To the President of the University:

I have the honor to present the following report of the School of Religion for the year 1938-39, which is the thirteenth academic year of the School. The enrollment for the year was 118 in addition to 21 who were registered in the Junaluska School of Religion of 1938. A full statistical report is appended.

The formal opening exercises of the year were held in York Chapel, Thursday, September 29. The devotional exercises were conducted by the Reverend Hubbard B. Porter, the Presiding Elder of the Durham District of the Methodist Episcopal Church, South, and the address was delivered by Dr. Kenneth W. Clark, Assistant Professor of New Testament, on the subject: "Current Trends in New Testament Research."

The work of the year has been characterized by an unusually fine spirit of harmony and co-operation among the students and Faculty. The attendance and interest in the School of Religion Assembly, which is held on Mondays and Thursdays at 12:30 o'clock, have been unusually good. The programs were in charge of a student committee. There have been spontaneous manifestations of personal religious life among the students resulting in the organization of several groups for prayer, discussion, and devotional fellowship. Some of these groups have met with members of the Faculty.

Dr. Albert C. Outler, in response to a request from the students, conducted weekly discussions for all interested students during several months of the year. The attendance at these informal meetings has been sufficiently good to justify their continuation. Closely allied to these discussion groups has been the series of open forum discussions under the sponsorship of a joint Faculty-student committee. The series had Drs. Rowe, Outler, Russell, and Petry as the leaders. Another group met with Dean Russell for the study and practice of mystical worship. One of the attempts to increase the spiritual life of the School of Religion was the spontaneous gathering of a number of students in York Chapel daily at 9:10 A.M. for a "morning watch." These ten-minute devotional programs were fittingly called "a short preparation for the day's work." All these indicate a growing sense of the need of vital religious experience as well as intellectual training and professional skill as a preparation for the ministry.

In accordance with the desire of students for an organ for the expression of student opinion and for the discussion of student's problems the publication of *Christian Horizons* as the School of Religion student journal was begun in the fall of 1938. It has already received wide recognition. One article was reprinted in a magazine of nationwide circulation. Requests were made for two others for reproduction in the *Federal Council Bulletin* and the *Friends' Intelligencer*, respectively. One of them was used in student discussion groups at Union

Theological Seminary. Letters from outstanding ecclesiastical organizations and from many church leaders expressed interest in the material that was presented, in the unique manner in which the journal permits and encourages freedom of student thought, and in the fact that it foretells the type of thought that will be evidenced in tomorrow's Southern pulpit. The circulation was something over four hundred copies, with the prospect of an increase during the coming school year.

The third annual School of Religion banquet was held in the Social Room of the Men's Union on Thursday, April 27. The retiring president of the student body introduced the recently elected staff of *Christian Horizons*, and the incoming officers of the School of Religion student body. The guest speaker of the evening was Professor Hornell N. Hart, Professor of Social Ethics.

Robert Arbaugh of the Class of 1940 was appointed one of the nine representatives from the Southern branch of Methodism to the Amsterdam Youth Conference in Holland in July, 1939.

During the spring months a faculty-student committee of the School sponsored a weekly devotional radio program from station WDNC. This met with such a favorable reception that plans are under consideration for continuing and extending it next year.

Since my last report two of our graduates have been appointed to important educational positions: John D. Lee, Jr., 1934, received the Ph.D. degree from Boston University in 1937 and was appointed Assistant Professor of Church History in the Candler School of Theology, Emory University, succeeding Dr. W. T. Watkins when he was elected bishop. Harold Hutson, 1935, received the Ph.D. degree from the University of Chicago in 1938 and was appointed Assistant Professor of Religion in Birmingham-Southern College.

The summer work of the students receiving aid from the Duke Foundation for Aiding Rural Methodist Churches in North Carolina grows increasingly satisfactory. The following is a summary of their work for the summer of 1938. Pastoral work: additions to the church, 648; sermons preached, 1,465; pastoral visits, 7,541; *vacation schools*, 173; instructors used, 820; pupils enrolled, 7,687; *training courses*, 88; pupils enrolled, 2,286; credits issued, 819.

The extramural influence of the School continued through activities on the campus and through the work of members of the Faculty and student body elsewhere. Students continued to conduct services in the Duke Hospital and the Durham County Jail, and to co-operate with the Duke Legal Aid Clinic. There were thirty-nine students who served as pastors of churches accessible from Durham. Others assisted Durham churches in Sunday Schools and young people's organizations. Of especial significance was the work of two students, Brooks Waggoner and Henry Clarence Glenn, who directed a social and recreational center in a neglected section of Durham under the auspices of the local Kiwanis Club. The work resulted in a marked improvement in the character of the neighborhood and prepared the way for a permanent center with a full-time worker in charge.

The Phillips Brooks Club continued under the direction of Professor Frank S. Hickman, who lectured the first hour of each monthly meeting on "Modern Approaches to the Problem of Immortality." The second hour was occupied by a wide variety of lecturers and subjects. The average attendance was about forty-five, and the average number at the noon luncheon twenty.

The Junaluska Summer School of Religion and the Junaluska Summer School with which it is affiliated, continued to prosper with Professor Paul N. Garber as director. During the summer session of 1938 in addition to Professor Garber, Professor Ormond and Assistant Professor Clark taught courses at the Junaluska Summer School.

Professor H. Shelton Smith, who was on leave of absence the first semester, after the resignation of the Reverend Trela D. Collins as Secretary of the North Carolina Council of Churches took on the duties of that position. He had the chief responsibility for the annual convocation of the Council in Durham, January 17-19, 1939. This gave our students a valuable opportunity to hear some of the leading religious workers and speakers in the United States and was the occasion of a visit of President Albert W. Palmer to our campus as chapel speaker and guest preacher.

The Faculty of the School of Religion maintain active connections with their various church organizations and their activities. The School also makes contributions to the religious world through the publications and programs of various learned and professional societies.

The University and especially the School of Religion had an important part in the Methodist Uniting Conference at Kansas City in May. Five members of the School of Religion Faculty were delegates. Dr. Garber's brochure on *The Legal and Historical Aspects of Methodist Unification* and his book *The Methodists Are One People* were powerful influences in the successful unification of Methodism. All the Duke delegates were appointed on important boards or committees.

During the fall semester, Professors Gilbert T. Rowe and H. Shelton Smith were on leave of absence. Professor Rowe exchanged places with Professor John K. Benton, Professor of Philosophy in Brothers College, Drew University, who conducted his courses here. During the year Dr. Albert C. Outler was transferred to the School of Religion Faculty.

Professor Paul N. Garber has been granted leave of absence from teaching for the fall semester next year. He will continue to care for the work of the Registrar's Office.

Two of the Faculty members received honorary degrees in June of this year: Professor B. Harvie Branscomb was given the degree of Litt.D. by Birmingham-Southern College and Professor J. M. Ormond D.D. by Randolph-Macon College.

A list of the books and articles published by members of the Faculty during the year is appended to this report.

There were no important changes in the curriculum this year. Some minor changes in the conditions of admission and the discontinuance of credit for work already credited on an undergraduate degree were

made effective beginning in 1939-40, to conform more fully to the ideals of the American Association of Theological Schools.

The Alumni Association held its annual meeting, June 8, 1939. The address was given by the Reverend A. E. Acey, pastor of the Boulevard Methodist Church, Richmond, Virginia, on "Recent Trends in Evangelism." The constitution of the Association was revised in order to simplify it. The Association continues its efforts to raise funds for a School of Religion lectureship. The alumni also had a meeting and luncheon in the West Union, March 21, in connection with the Centennial Symposium on Modern Religious Problems.

In connection with the Duke Centennial Fund, Mr. N. Edward Edgerton, of Raleigh, North Carolina, an alumnus of Duke University, Class of 1921, and vice-president of the Duke University Alumni Association, established the N. Edward Edgerton Scholarship Fund in the School of Religion. This participation in the Duke Centennial Fund by Mr. Edgerton is especially appreciated since it is the first donation by alumni and friends of the School of Religion for the exclusive benefit of the School of Religion that has been made since the opening of the School of Religion in 1926.

The purpose of the N. Edward Edgerton Scholarship Fund, as specified by the donor, is a "scholarship or scholarships to be awarded only to student candidates for the B.D. degree in the School of Religion of Duke University. The awards shall be made annually or so often as the income from the investment permits, which shall be made by the Scholarship Committee of the University on recommendation of the Committee from the Faculty of the School of Religion. In awarding the scholarship or scholarships, preference shall be given to a child or children of the donor." Payments into the fund will begin this year and will continue until 1941 and until the amount of the initial subscription has been supplied.

The Centennial Exercises brought an unusual number of lecturers and preachers to the campus in addition to the regular guest preachers for the University Chapel. On December 1, 1938, Professor Millar Burrows, Professor of Biblical Theology in Yale University and President of the American Schools of Oriental Research, gave a lecture in Page Auditorium under the auspices of the School of Religion on the subject: "Digging for the Past in Palestine." The Centennial Lecture on religion was delivered by President Henry Sloan Coffin of Union Theological Seminary, New York, November 28, on "Religion in America during the Past One Hundred Years."

The Centennial Symposium on Modern Religious Problems, March 20-21, 1939, was arranged by a committee of which Professor Paul N. Garber was chairman, and proved to be one of the outstanding occasions of the year's celebrations. A larger number of the alumni of the School of Religion returned for this occasion than have ever been together since its founding. The general attendance throughout the two days was excellent. Several hundred ministers and other friends came from surrounding states, North Carolina, Virginia, and South Carolina being

especially well represented. The addresses maintained a high order of excellence. It proved impossible to publish the addresses, as was desired, but Bishop Ivan Lee Holt's paper on "Contemporary Religion in the Southern States" was printed in the spring number of the *School of Religion Bulletin*.

BOOKS AND ARTICLES PUBLISHED BY MEMBERS OF THE SCHOOL OF
RELIGION FACULTY DURING 1938-39

BRANSCOMB, HARVIE

"The Biblical Doctrine of the Holy Spirit," *Religion in Life*, VIII, 195 (1939).

DUBS, HOMER H.

"The Victory of Han Confucianism," *Journal of the American Oriental Society*, LVIII, 435-559 (Sept., 1938).

"Solar Eclipses During the Former Han Period," *Osiris*, V, 499-522 (1938).

"The Present Significance of Oriental Philosophies," *The Philosophical Review*, 311-315 (May, 1939).

GARBER, PAUL N.

The Methodists Are One People. Nashville: Cokesbury Press, 1939.

"The Circuit Rider's Horse," *World Outlook*, pp. 340-342 (Sept., 1938).

"John C. Kilgo as a Christian Educator," *Christian Advocate* (Aug. 26 and Sept. 2, 1938).

"The Spread of Methodism to 1844," *World Outlook*, pp. 7-11 (May, 1939).

"The School of Religion of Duke University," *Daily Christian Advocate of Uniting Conference* (May 1, 1939).

"Baltimore's Background of Methodist Unification," *Methodist Protestant Recorder*, pp. 11-13 (April 28, 1939).

HART, HORNELL N.

"Value-Judgments in Sociology," *American Sociological Review*, III (Dec., 1938).

MYERS, H. E.

"Simon Peter," *Church School Magazine* (Jan., 1939).

ORMOND, J. M.

"Training Workers for the Rural Field," *Scarritt College Voice*, X (Sept., 1938).

OUTLER, ALBERT C.

"Origen and the *Regulae Fidei*," *Church History* (Sept., 1939).

PETRY, RAY C.

"St. Francis, Society, and the Ultimate Order," *Duke School of Religion Bulletin*, IV, 29-33 (May, 1939).

STINESPRING, W. F.

Gerasa, City of the Decapolis (New Haven, 1938). Contributed first chapter, "History of Excavation at Jerash."

"Edward Robinson in Jerusalem," *Duke School of Religion Bulletin*, pp. 10-16 (Feb., 1939).

PAPERS AND ADDRESSES READ OR GIVEN BEFORE LEARNED AND
PROFESSIONAL SOCIETIES

CANNON, JAMES

Phi Beta Kappa Meeting, University of North Carolina, Chapel Hill, May, 1939. Address: "The Pure Flame of Truth."

CLARK, KENNETH W.

Society of Biblical Literature and Exegesis, Union Theological Seminary, Dec. 29, 1938. "Family 2412 in the Text of Acts."

DUBS, HOMER H.

The American Oriental Society, April 12, 1939, Baltimore, Md. "The Economic Reforms of Wang Mang."

GARBER, PAUL N.

The Historical Society of South Carolina Conference of the Methodist Episcopal Church, South, Hartsville, S. C., Nov. 9, 1938. Address: "John Carlisle Kilgo, the Gift of South Carolina Methodism to North Carolina."

The Historical Society of North Carolina Conference of the Methodist Episcopal Church, South, Elizabeth City, N. C., Nov. 16, 1938. Address: "The Contributions of John Carlisle Kilgo to North Carolina Methodism."

The General Missionary Council of the Methodist Episcopal Church, South, San Antonio, Texas, Jan. 4, 1939. Address: "The Spread of Methodism Prior to 1844."

The Southeastern section of the American Association of Theological Schools, Montreat, N. C., June 29, 1939. Address: "The Struggle for a Trained Ministry in the Methodist Episcopal Church, South."

HART, HORNELL N.

The Southern Sociological Society, Atlanta, Ga., March 31-April 1, 1939. Paper: "The Culture-Complex Concept as a Research Tool."

The Eastern Sociological Society, Asbury Park, April 22, 1939. Paper: "Sorokin's Data Versus his Conclusions."

OUTLER, ALBERT C.

The American Society of Church History, Princeton Theological Seminary, April 22, 1939. Paper: "Origen and *Regulae Fidei*."

PETRY, RAY C.

The American Society of Church History, Princeton Theological Seminary, April 28, 1939. Paper: "Medieval Eschatology and St. Francis of Assisi."

STINESPRING, W. F.

The Society of Biblical Literature and Exegesis, New York, Dec. 29, 1938. Paper: "The Critical Faculty of Edward Robinson."

The American Oriental Society, Baltimore, April 12, 1939. Paper: "The Meter of David's Lament over Saul and Jonothan."

TABLE 1

ENROLLMENT, 1938-39

Men	117
Women	1
<i>Total</i>	118

TABLE 2

DENOMINATIONS REPRESENTED

Methodist Episcopal Church, South	101	Holiness	1
Congregational-Christian	6	Methodist Episcopal Church.....	1
Baptist	4	Presbyterian	1
Methodist Protestant	3	Protestant Episcopal	1

TABLE 3

STATES REPRESENTED

North Carolina	60	California	2
Virginia	13	Kentucky	2
South Carolina	10	Maryland	2
Texas	7	West Virginia	2
Alabama	4	Arizona	1
Mississippi	4	Illinois	1
Florida	3	Pennsylvania	1
Louisiana	3	Tennessee	1
Arkansas	2		

TABLE 4

COLLEGES AND UNIVERSITIES REPRESENTED

Duke University	17	Arizona State Teachers College...	1
Wofford College	16	DePauw University	1
Elon College	8	Emory University	1
High Point College.....	6	Evansville College	1
Southern Methodist University...	5	Florida Southern College.....	1
Wake Forest College.....	5	Gordon College	1
Catawba College	4	Hampden-Sydney College	1
Davidson College	4	Kentucky Wesleyan College.....	1
Lenior-Rhyne College	4	Lynchburg College	1
University of North Carolina....	4	Newberry College	1
Birmingham-Southern College ...	3	Redlands College	1
Centenary College	3	St. John's College.....	1
Emory and Henry College.....	3	Salem College	1
Randolph-Macon College	3	Scarritt College	1
Hendrix College	2	Southeast Missouri State	
Louisiana State University.....	2	Teachers College	1
Millsaps College	2	Tennessee Polytechnic Institute..	1
Morris-Harvey College	2	University of Arkansas.....	1
University of Mississippi.....	2	University of Richmond.....	1
University of South Carolina....	2	University of Texas.....	1
American University	1	Virginia Polytechnic Institute....	1

ELBERT RUSSELL,

Dean.

THE SCHOOL OF LAW

To the President of the University:

Permit me to submit the following report of the School of Law for the period from July 1, 1938, to June 30, 1939.

ENROLLMENT

The enrollment for the past year was 114 as compared with 110 for the year 1937-38 and 94 for the year 1936-37. This year the students came from thirty-two states and one foreign country, Cuba, with approximately 25 per cent from North Carolina and 60 per cent from Southern states. All but ten held college degrees. The following states and country were represented: Alabama, Arkansas, California, Connecticut, Delaware, District of Columbia, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, and Cuba.

Contrary to the experience of many law schools in recent years, the graduates of the Duke Law School, almost without exception, have found satisfactory locations or connections with law offices. A number from each of the last several graduating classes have secured positions with prominent New York firms.

THE LOG CABINS

The Law School Log Cabins were occupied for the first time during the past year. Thirty-two students were housed in these quarters, divided among the classes as follows: first year, 17; second year, 7; and third year, 8. Most of the second- and third-year students showed a decided improvement in scholarship, with an average improvement in grades for the whole group of approximately two points. All the students occupying these quarters have been unanimous in their approval of the Cabin plan and very enthusiastic over the study conditions afforded.

The Log Cabins attracted much attention, and pictures of them appeared in the rotogravure sections of many leading American newspapers. Moving pictures were taken by Pathé News which were shown in all the larger cities and towns of the United States.

THE CENTENNIAL

As a part of the Duke University Centennial Celebration, two symposia were held by the Law School: one on "Law in Modern Society" and the other on "Administrative Practice." The first symposium consisted of two evening meetings which were held in Page Auditorium and were open to the general public. At the first meeting, the Honorable John J. Parker, Judge of the United States Circuit Court of Appeals of the Fourth Judicial Circuit, presided, and addresses were delivered by

Professor Harold J. Laski of London, and Senator Arthur H. Vandenberg of Michigan. At the second evening meeting, with the Honorable Heriot Clarkson, Senior Judge of the Supreme Court of North Carolina, presiding, addresses were presented by the Honorable John Dickinson of Pennsylvania, and Mr. Walter Lippmann of Washington, D. C. The other symposium dealt with administrative practice and with administrative problems of interest to members of the bench and bar. The following papers were presented at these meetings: "Rules of Evidence Before Administrative Boards," by Justice Harold M. Stephens of the United States Court of Appeals for the District of Columbia; "Procedure Under the National Labor Relations Act," by the Honorable Charles Fahy, General Counsel of the National Labor Relations Board; "Federal Taxation—Practice and Procedure," by Professor Roswell Magill of Columbia University, formerly Under Secretary of the Treasury; "Procedure Under the Federal Wage and Hour Act," by the Honorable A. L. Fletcher, Assistant Administrator of the Wage and Hour Division of the United States Department of Labor. President Few delivered an address of welcome at the opening session, and the various meetings were presided over by Mr. Fred S. Hutchins, President of the North Carolina State Bar, the Honorable Harry McMullan, Attorney General for the State of North Carolina, and Dean Horack of the Duke School of Law.

In connection with these sessions there was held the fall meeting of the Tenth District Bar of the North Carolina State Bar with its president, Dean M. T. Van Hecke of the University of North Carolina School of Law, presiding. At this meeting Dean H. C. Horack of the Duke University School of Law was elected president for the following year, and in April, 1939, the annual meeting of this Association was held at the Duke Law School.

As one of the series of Centennial Lectures, Dean Roscoe Pound of the Harvard Law School delivered an address on "American Juristic Thinking in the Twentieth Century."

PUBLICATIONS

During the past year the subjects treated in *Law and Contemporary Problems* were: "Home Financing," "The New Food, Drug, and Cosmetic Legislation," "Alimony," and "The Wage and Hour Law." Each issue has been well received and has been the subject of numerous reviews and notices in legal and business periodicals. More single copy orders were received for the Symposium on the Food and Drug Laws between its publication date in February, 1939, and July 1, 1939, than for any issue in any previous year. It is apparent that this number will have to be reprinted in the near future as the larger than usual edition originally printed is now almost exhausted. The number of orders, other than subscriptions, for all issues which were filled during the past year totaled approximately three thousand copies. These were sent to all parts of this country and to many foreign nations. While orders from

the legal profession predominated, a great many were received from industrial concerns, universities, and governmental officials.

The following articles appearing in *Law and Contemporary Problems* during the past year were prepared by students of the Duke Law School: "Laws Relating to the Investment of Trust Funds, 1930-1937," by Gustav B. Margraf; "Common Trust Fund Legislation," by Robert W. Bogue; "Legislative History of the Fair Labor Standards Act," by John S. Forsythe; "The Exercise of Judicial Discretion in the Award of Alimony," by Edward W. Cooley; and "Grounds for the Modification of Alimony Awards," by Eugene Desvernine. The last-mentioned contribution has been selected for inclusion in the October, 1939, number of *Current Legal Thought* as one of the six best articles recently published in American legal periodicals.

The *Duke Bar Association Journal* was accorded gratifying recognition when one of the student case comments appearing in it was reprinted in two successive issues of the *New York Law Journal*, the legal newspaper serving the New York City bar. The June, 1938, number of the *Journal of the American Judicature Society* made the following comment concerning the Duke Bar Association:

Students of Duke University law school get one kind of preparation for the profession they aspire to enter more fully, probably, than those in any other school. For years all students at Duke have been members of a bar association. Not only are bar affairs ably discussed at regular meetings, but there is also the excellent *Duke Bar Association Journal*, which has been published twice a year for six years. The work done by officers and committees of this Association is far better than that of a good many voluntary associations. It has the advantage of being inclusive. The latest number of the *Journal* is a model for student editors. It would be fortunate for North Carolina if all graduates from this school should be admitted in that state. They would know from the start what their profession should do in the support of collective interests.

FACULTY ACTIVITIES

Among the Faculty activities and publications during the past year are the following:

Professor Bryan Bolich has in preparation an article on "Constructive Eviction and Abandonment."

Professor John S. Bradway was special editor of the Symposium on Alimony in the Spring Number of *Law and Contemporary Problems*, Volume VI. He also wrote several book reviews and was active in many Legal Aid projects both state and national.

In addition to his work as editor of *Law and Contemporary Problems*, Professor David F. Cavers has written "The Food, Drug, and Cosmetic Act of 1938: Its Legislative History and Its Substantive Provisions," appearing in *Law and Contemporary Problems*, VI, 2-42, and "The North Carolina Food, Drug, and Cosmetic Act," *North Carolina Law Review*, XVII, 400-415 (June, 1939).

Professor Lon L. Fuller has written various book reviews which have been published in the *University of Pennsylvania Law Review*, the *North Carolina Law Review*, and the *Illinois Law Review*. He has in prepara-

tion an article to be entitled "The Function of Legal Formalities," and another on "The Function of the Requirement of Consideration." He has also been engaged during the past year in writing a book to be published next spring by the Northwestern University Press, containing the three Rosenthal Lectures which he is to deliver at Northwestern University at that time.

Professor H. C. Horack contributed to a symposium on Admission to the Bar which appeared in the April, 1939, number of the *Illinois Law Review*. His article was entitled "Securing Proper Bar Examinations."

Professor Elvin R. Latty has prepared in mimeographed form, "Cases and Materials on Chattel Transactions," for the use of the first-year students in the Duke Law School, and "Cases and Materials on Corporation Finance," for the use of third-year students in the advanced course in Business Associations.

Professor C. L. B. Lowndes published articles in the November and December, 1938, numbers of the *University of Pennsylvania Law Review* on "Taxation and the Supreme Court, 1937 Term." During the coming year Professor Lowndes is to offer a second course in Taxation dealing with Federal Tax Problems.

During the past year Professor Douglas B. Maggs was on leave of absence as Special Assistant to the Attorney General of the United States and was one of the government's lawyers in charge of the medical society antitrust case during its earlier stages. Later, as Chief of the Wage-Hour Unit of the Department of Justice, he was in charge of criminal prosecutions throughout the United States under the new national Fair Labor Standards Act. For several years Professor Maggs, as general editor, aided by about twenty professors from various law schools, has been preparing the manuscript for *Selected Essays on Constitutional Law*. This work, in four 1,600-page volumes, was published for the Association of American Law Schools in the fall of 1938.

Professor Malcolm McDermott, in collaboration with Dr. Raphael Lenkin of Warsaw, made a translation of the Polish Penal Code which was published by the Duke University Press. As a member of the Commission on Revision of Laws of North Carolina Relating to Estates, he assisted in drafting the report which was submitted to the 1939 Legislature of North Carolina. Professor McDermott won the 1939 Ross Essay Contest conducted by the American Bar Association on the general topic, "To What Extent Should the Decisions of Administrative Bodies Be Reviewable by the Courts?" Professor McDermott is to read his essay at the annual meeting of the American Bar Association in San Francisco, at which time the prize of three thousand dollars will be presented to him. His winning essay appears in the June, 1939, issue of the *American Bar Association Journal*.

Professor J. Douglass Poteat wrote for the August, 1938, issue of *Law and Contemporary Problems* on "State Legislative Relief for the Mortgage Debtor During the Depression." He is now engaged in the revision of Sturges' casebook on Debtors' Estates, which will be ready for use some time during the coming year.

Mr. William R. Roalfe has written a series of three articles on the general topic, "The Developing Role of the Library in Legal Education," published in the July, 1938, November, 1938, and January, 1939, numbers of the *Law Library Journal*. These articles are entitled "The Relation of the Library to Legal Education," "The Essentials of an Effective Law School Library Service," and "Some Suggestions for Improving the Law School Library Service." The June, 1939, issue of the *American Bar Association Journal* published another article by Mr. Roalfe entitled "The Increasing Need for Bar Libraries in the Smaller Cities." As chairman of the Committee on the Expansion Plan of the American Association of Law Libraries, he has directed the formation of a plan for modifying and enlarging the activities of this association. These proposals will be presented at the meeting to be held in connection with the American Bar Association in San Francisco, in July, 1939. He has been active as chairman of a number of committees of the American Association of Law Libraries, looking toward co-operation with the American Library Association, and during the past year has served as president of the North Carolina Law Library Association. He was recently made chairman of the Association of American Law Schools' Committee on Co-operation with the American Association of Law Libraries.

Members of the Law Library Staff who are engaged in research on various subjects are the following: Miss Marianna Long, "A Bibliographical Check-List of the Publications of the American Law Institute"; Miss Katherine Day, "A Check-List of Cumulative Indexes to Current Anglo-American Legal Periodicals," in the May issue of the *Law Library Journal*; Miss Hazel Mangum is preparing a cumulative index to the Proceedings of the Association of American Law Schools which will be published by that association when completed; Mrs. Annie Walker is engaged in a study of the manner in which law school catalogs and announcements deal with the library. A summary of her findings and constructive suggestions will appear in a forthcoming article in the *Law Library Journal*.

Professor Paul H. Sanders was special editor of the Summer, 1939, issue of *Law and Contemporary Problems*, on the Wage and Hour Law. He prepared the commentary on "Pardon" for Volume III of the Attorney General's Survey of Release Procedures, which will also appear in the July issue of *Probation*, the quarterly published by the United States Department of Justice. He has also written an article entitled "A State Department of Justice for North Carolina," which will appear in an early number of the *Journal of Politics*.

During Professor Maggs's leave of absence, his courses in Constitutional Law and in Torts were taught by Professor Arthur M. Cathcart of Stanford University Law School. During Professor Maggs's absence the course in Administrative Law was taught by Professor Frank W. Hanft of the Law School of the University of North Carolina and a member of the North Carolina Utilities Commission.

For the coming year Professor Lon L. Fuller has been granted a leave of absence in order to accept a visiting professorship at the Harvard

Law School. During his absence the course in Contracts and Damages will be taught by Professor Harold Shepherd of the University of Cincinnati and Secretary of the Association of American Law Schools.

LIBRARY

The Law Library on June 30, 1939, contained 61,351 bound volumes. In addition to its use by the Faculty and students of the Law School, there is a constantly increasing use by the Faculty and students of the Graduate School and by many undergraduate students of certain departments. Its position as the best law research library of the South is evidenced by the fact that through the year many persons have come from a considerable distance to work here. Such persons include not only lawyers who have difficult cases requiring the use of an extensive library, but others who are doing research in special fields.

The need for additional library space is most urgent, for at the present rate of growth, which cannot be considered abnormal, in approximately eighteen months practically every available foot of space will be in use without leaving room for normal expansion or even continuations of present sets.

Not only are many books now placed on the third floor of the Law Building, but even stairways have been lined with shelves in order to provide space for valuable library material. The increasing demand for seating space in the Library and particularly for table and carrel space prevents expansion of stacks and shelving space but also makes impossible any further additions to the limited number of carrels which are now available. These two vital needs must be taken care of, neither of which can be increased at the expense of the other. How to provide for the normal growth of the Library after another eighteen months seems impossible of solution in our present quarters. Should the Library withhold gathering of needed material for even a short time serious damage would be done to the fine collection the School already has, and the cost of securing much of this material at a later time would be enormously increased, and, in some cases, almost prohibitive, while scarce and much needed volumes would have to be passed by which may not again be available for many years and then at greatly increased costs.

GRADUATE SCHOLARSHIPS

Another great need of the Law School is a fourth year of instruction for graduates of Southern law schools where limited faculties and curricula make impossible study and development along many lines which have become increasingly important in recent years. The Duke Law School with its Library and its Faculty, practically all of whom are engaged in extensive research in their respective fields, is in these respects fully prepared to provide such work. Practically all graduate work in other law schools is financed by fellowships which fully cover the student's costs for the year, not only as to fees and tuition but as to living expenses.

Such aid is particularly necessary in the South if the Duke Law

School is to render the service of which it is capable and which is much needed because of the limited curricula and small faculties of most Southern law schools. Many of the most brilliant young men of the South, because of meager financial resources, cannot prepare themselves along lines in which they may wish to specialize or in which they feel there is the greatest opportunity. After two to four years of college and three years in a local law school, these men have exhausted every resource and often are considerably in debt for their education. Without fellowships such as are being offered for graduate work in the better law schools of America, any continuation of law study is absolutely impossible. If such aid could be provided, restricted, if it seemed desirable, to one or two of the most brilliant men from each of the Southern States, the influence of the Duke Law School in the South would be very rapidly advanced. Men so trained would be prepared to go into the best law offices in the South, and in many cases would return to Southern law schools as teachers, to the general benefit of legal education and the standards of the profession in their states.

Such a plan would call for ten or twelve fellowships of the value of about eight hundred dollars each or an annual expenditure of from eight to ten thousand dollars. Though it might be difficult to secure an endowment which should produce this sum, it would seem desirable to establish this plan if sufficient funds were assured for as much as a five-year period, trusting to the future for continuation of the scheme if it seems to be accomplishing the purposes suggested in influencing the profession and legal education in the area in which the Duke Law School is so much interested. The plan would look towards the training of only the most capable and worthy and those who are most in need of this assistance. I do not doubt that in this way the influence of the Duke Law School would be made effective both directly and indirectly in a very short period of time.

This plan would in no way conflict with local law schools since they are in no position to provide that which the Duke Law School has to offer, and it is believed that their co-operation could be secured in selecting the students most worthy of this aid. It should not be inferred that the graduate work offered would not be open to students from all sections of America, but it is desired to emphasize here the need of financial aid for students from the Southern area.

Not only is the method of instruction as given at the Duke Law School much more effective in developing the individual than at most other schools, but many courses are offered which limited resources do not make available in most Southern schools. Among the courses in which men might specialize in a graduate year at Duke may be mentioned Administrative Law, Taxation, Corporation Reorganization and Management, Legislation, Labor Law, The Regulation of Business, Legal Aid Clinic, Jurisprudence, Legal History, as well as many others where the scope and content of the courses as presented make them quite different from courses usually given under similar titles.

H. CLAUDE HORACK,

Dean.

THE SCHOOL OF MEDICINE

To the President of the University:

The past nine years, since the opening on July 21, 1930, of the Schools of Medicine, Nursing, and Dietetics and the Hospital, have been a period of rapid growth with expansion of the Staff and additions to the building. In starting our tenth year, the emphasis has been changed, and all of our efforts are bent on strengthening the progress which has been made, and on improving the quality of the medical and teaching services.

The progress which has been made is shown in the attached table. 122,810 patients have been examined and treated since the Hospital was opened. The highest hospital census of 389 was reached on February 6, 1939. The average daily number of hospital patients was 350. 66,946 visits were made to the Public Dispensary during the past year. They have come from 99 of the 100 counties of North Carolina, and from 24 other states.

On June 5, 1939, 64 physicians were graduated, and on September 28, 1939, 66 first-year students will be admitted. The latter were selected from 680 completed applications.

Of the 316 graduates of the Duke University School of Medicine from the first class of 1932 through 1939, 204 are still engaged in internships at various hospitals (79 per cent spend more than the required two years), and 112 are in practice. Of the latter, 34, or 30 per cent, are in practice in twenty-six towns in North Carolina, and 36 have located in the other Southern states, making a total of 70, or 62 per cent, in practice in the South. Twenty-two per cent of our students were born in North Carolina; so it is obvious that Duke is attracting additional physicians to practice here. Seven Duke graduates are in practice in West Virginia, six in Virginia, five each in South Carolina and Florida, three each in Alabama and Texas, two each in Georgia and Louisiana, and one each in Mississippi, Maryland, and Kentucky.

We wish to record our sorrow over the death of Dr. Kenneth Brown Rothey on June 17, 1939, and to express our sympathy to his family. Dr. Rotley received his premedical and preclinical education at the University of West Virginia and was graduated from Duke University School of Medicine on December 19, 1933. After internship and residencies at the Fitkin Memorial and Somerset hospitals, he commenced the practice of medicine in Elizabeth, Pennsylvania. Dr. Rothey's was the first death among our graduates.

The scientific contributions of the Medical Faculty and students have increased; 126 articles by 163 authors have been published during the past year. The greatly appreciated gifts and grants-in-aid in the attached list have made this research possible, and we hope that this support will be continued.

The medical students are looking forward with pleasure to living in Few Quadrangle in September. Rooming on the campus near the School of Medicine is a great advantage to medical students because of their long hours and night work, especially during their clinical years.

The new building between the Hospital and Nurses Home, for which the Staff wish to thank the Trustees of the Duke Endowment and of Duke University, will be completed in 1940. It will provide 80 offices and examining rooms for the Medical and Surgical Private Diagnostic clinics, accommodations for 113 private and semiprivate patients, and an additional dining room for the nurses. Having these offices and examining rooms in the new building will release several laboratories in the School of Medicine, which are very much needed.

Through the generosity of Dr. Robert S. Carroll, to whom all of us are grateful, Highland Hospital, Asheville, North Carolina, has been presented to the University to form the therapeutic division of the new Department of Psychiatry, which we hope will be established in the near future. Dr. Carroll will continue as Director of Highland Hospital.

The Departments of Medicine, Physiology, Nutrition, and Biochemistry have carried on extensive research studies with the staff of the North Carolina Experiment Station and the Department of Dairy Husbandry of State College.

With the co-operation of the Pneumonia Control Commission of the State Board of Health, a course in the typing of pneumococci, and other means of diagnosis for laboratory technicians was held January 16-20, 1939.

The School of Medicine assisted the Summer School in holding the second annual School for Workers in Children's Homes and Orphanages from July 25 to August 13, 1938.

In connection with the Centennial Program, a symposium on Southern Medical Problems and the Future of American Medicine was held October 13 to 15, 1938. Over one thousand physicians attended.

Under the sponsorship of the North Carolina State Board of Health, a postgraduate clinic on the management of syphilis was held March 24-25, 1939. A large number of health officers and other physicians attended.

In co-operation with the medical faculties of the University of North Carolina and Wake Forest College, postgraduate clinics for colored physicians were held at Lincoln Hospital, October 10-12, 1938.

The following visiting lecturers, to whom we express our thanks, have addressed the Staff and students during the past year: Drs. James B. Bullitt (Chapel Hill, N. C.), Arturo L. Carrion (Puerto Rico), Harold N. Cole (Cleveland, Ohio), E. Fullerton Cook (Philadelphia, Pa.), John Elliott (Salisbury, N. C.), Molly Harrover Erickson (Montreal, Canada), Morris Fishbein (Chicago, Ill.), Allen W. Freeman (Baltimore, Md.), A. Bruce Gill (Philadelphia, Pa.), E. R. Hardin (Lumberton, N. C.), Norman R. Ingraham (Philadelphia, Pa.), Philip C. Jeans (Iowa City, Iowa), Wingate M. Johnson (Winston-Salem, N. C.), Henry H. Kessler (Newark, N. J.), Lawrence Kolb (Lexington, Ky.), K. Linderstrom Lang

(Copenhagen, Denmark), William G. MacCallum (Baltimore, Md.), William deB. MacNider (Chapel Hill, N. C.), George W. McCoy (New Orleans, La.), Joseph Earle Moore (Baltimore, Md.), Roy Norton (Chapel Hill, N. C.), Edward W. A. Ochsner (New Orleans, La.), Paul A. O'Leary (Rochester, Minn.), John P. Peters (New Haven, Conn.), Carl V. Reynolds (Raleigh, N. C.), William P. Richardson (Chapel Hill, N. C.), Milton J. Rosenau (Chapel Hill, N. C.), William H. Sebrell, Jr. (Washington, D. C.), L. B. Sharp (New York City), J. Buren Sidbury (Wilmington, N. C.), Albert M. Snell (Rochester, Minn.), John H. Stokes (Philadelphia, Pa.), Joseph Stokes, Jr. (Philadelphia, Pa.), Raymond A. Vonderlehr (Washington, D. C.), George H. Whipple (Rochester, N. Y.), and Mark V. Zeigler (Washington, D. C.).

The following new members have been added to the Faculty of the School of Medicine: George J. Baylin, Instructor in Anatomy, John E. Dees, Instructor in Urology, Susan Coons Dees, Instructor in Pediatrics, William D. Farmer, Instructor in Otolaryngology, Philip Handler, Research Associate in Physiology and Nutrition, Talnage L. Peele, Instructor in Anatomy, D. Gordon Sharp, Research Associate in Surgery, and Alton R. Taylor, Research Associate in Surgery.

The National Cancer Institute, to the officers of which we are indebted for this and other assistance, has loaned an additional supply of radium to treat charity patients suffering from cancer. The National Cancer Institute also is maintaining two fellows here, and is supporting the research work on cancer.

Greatly to the regret of everyone, Miss Bessie Baker, Dean of the School of Nursing since its beginning in 1930, felt that her health would not permit her to continue her duties. She has been made Professor Emeritus of Nursing. On June 4, 1939, her former students and associates presented a portrait of Miss Baker to the Nurses's Home. The School of Nursing, to which Miss Baker has contributed more than anyone else, is a great credit to her untiring efforts.

Miss Margaret I. Pinkerton has been elected Dean of the School of Nursing and will begin her duties on October 5, 1939. Miss Pinkerton was graduated from the University of Virginia School of Nursing in 1927 and from Teachers College, Columbia University, in 1933. She has held nursing, executive, and teaching positions in Richmond, Charlottesville, and St. Louis.

On June 5, 1939, 23 nurses received the diploma of Graduate Nurse, and 18 were awarded the degree of Bachelor of Science in Nursing, the latter having completed at least two years of college work in addition to three years in the School of Nursing. On September 25, 1939, 59 first-year student nurses will be admitted, making a total of 134 student nurses. The present Freshman Class was selected from 188 applicants.

Since the graduation of the first class of the School of Nursing in 1933, 130 nurses have completed the course. Sixty-two, or 48 per cent, are practicing their profession in North Carolina, and an additional 35 in the other Southern states, making a total of 97, or 75 per cent, in the South. Forty nurses, or 31 per cent of the graduates, have married.

The School of Dietetics has splendidly continued its training of dietitians and nurses, and the maintenance of the dietetic division of the Hospital.

The training of hospital administrators, which was started in 1930, has continued to fill a great need. Each year, two to four university graduates of high scholastic standing, whose character, honesty, tact, health, and ability for leadership are good, have been appointed as administrative interns for three years at a small salary and maintenance. They attend seminars on hospital administration, and receive training, and also assist in the operation of the admitting, collection, purchasing, storeroom, laundry, dispensary, and private diagnostic divisions of the Hospital. In addition, they spend three months with the Hospital Section of the Duke Endowment. During the past nine years, twelve administrators have taken this preparation, and are holding responsible positions in this or related fields.

The Social Service Division of Duke Hospital in co-operation with the Division of Public Welfare and Social Work of the University of North Carolina has provided three months of training in hospital social problems for eleven graduate students.

Although the period of physical expansion has been completed, and the number of medical students, nurses, hospital beds, and Medical Faculty, except for psychiatry and the House Staff, has reached a practically constant level, we need to strengthen and improve the gains which have been made, in order that progress and normal growth will not cease.

Among these requirements are: an additional obstetric delivery room, provision for the isolation of infected patients, another elevator, enlarged animal quarters, a university or hospital laundry, and a separate building or soundproofing for the ice machinery of the Hospital is essential. At present, the motors and compressors, which are located under the hospital amphitheatre, are so noisy that many lectures and clinics can scarcely be heard.

The number of nurses, dietitians, anesthetists, physiotherapists, and interns exceeds the beds in the Nurses Home and Interns Quarters. Through the co-operation of the University and the Duke Endowment, four houses and three cabins are providing additional accommodations, but more are greatly needed. Twelve interns are sleeping in Few Quadrangle, although they must be on emergency night call. All of us hope that a larger Nurses Home can be built in the near future. Most of the Centennial gifts of the Medical Faculty were allocated to the new Nurses Home, and the members of the Hospital Staff engaged in private practice are making additional monthly contributions to a fund for this purpose.

The road in front of the Hospital should be re-routed behind the powerhouse to divert the traffic, which constitutes an ever present danger to the lives of both patients and Staff. A filling station, lunch room, and more parking space for the patients and their relatives in front of the Nurses Home, as shown in Figure 1, would not only fill a great need, but would furnish considerable revenue. The present lunch room in the students' store is too congested, and the parking facilities are inadequate.

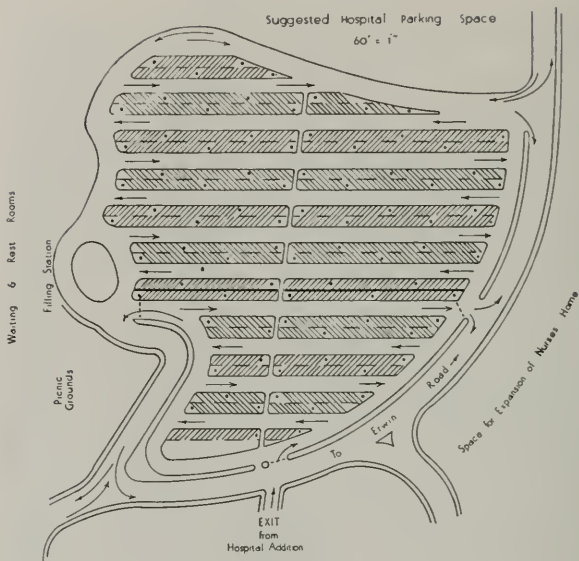


FIGURE 1.

As stated in previous reports, all of us feel that the progress which has been made by the Schools of Medicine, Nursing, and Dietetics, and the Hospital since their opening in 1930, can be maintained only by doing more intensive work, and we are making every effort toward that goal.

TABLE 1
PROGRESS OF DUKE UNIVERSITY SCHOOLS OF MEDICINE, NURSING,
AND DIETETICS, AND DUKE HOSPITAL

	1935	1936	1937	1938	1939
Medical students	219	243	245	257	258
Pupil nurses	68	71	73	89	134
Student dietitians	4	4	4	6	6
Interns and residents	57	64	71	80	85
Graduate nurses	107	110	119	124	130
Average daily patient census	279	308	311	316	350
Maximum daily patient census	339	348	355	360	389
Total days of hospital care	100,969	109,150	113,654	115,474	127,710
Total consultations in Public Dispensary	45,681	48,500	50,000	52,364	66,946

Total collections from bed patients	\$193,027	\$240,000	\$297,000	\$298,000	\$359,000
Total contributions from cities, counties chari- ties, etc.	\$ 36,939	\$ 37,034	\$ 50,542	\$ 52,093	\$ 63,333
Average daily per capita collection from all sources other than Duke University and the Duke Endowment.\$	2.28	\$ 2.54	\$ 3.06	\$ 3.03	\$ 3.28

TABLE 2

GIFTS TO THE SCHOOL OF MEDICINE AND HOSPITAL, 1938-1939, FOR WHICH THE
MEDICAL FACULTY EXPRESS THEIR THANKS

Anatomy:

\$187 for research expenses from the Josiah Macy, Jr., Foundation.

\$60 for endocrine research from the Schering Corporation.

Bacteriology:

\$4,000 for research on fungi from the John and Mary R. Markle Foundation.

\$1,000 for research on the vitamin B₂ complex, and staphylococcus antitoxin from the Lederle Laboratories.

\$500 for research on pellagra from Ciba Pharmaceutical Products.

Biochemistry:

\$2,000 for research on proteins from the Lederle Laboratories.

Physiology and Nutrition:

\$4,000 for research on vitamin G from the John and Mary R. Markle Foundation.

Sodium sulfanilyl sulfanilate from the Lederle Laboratories.

Medicine:

\$273 anonymously for the chair of Medicine.

\$11,531 for research from the Department of Medicine.

\$10,000 for research from the Anna H. Hanes Fund.

\$12,414 for salaries and expenses of the Diagnostic Clinic from the Department of Medicine.

Sulfapyridine, enterococcus and streptococcus serum from the Lederle Laboratories.

Sulfapyridine from the Calco Chemical Company.

Disulon from Alba Pharmaceutical Company.

Sulfapyridine, and vitamins B₁ and B₆ from Merck and Company.

Surgery:

\$2,220 for the study of disease from the Department of Surgery.

\$6,750 for salaries and expenses of the Diagnostic Clinic from the Department of Surgery.

Disulon and Sodium Disulon from the Alba Pharmaceutical Company.

Sulfapyridine from the Lederle Laboratories.

Promin from Parke, Davis and Company.

Sodium disulfanilamide from the Calco Chemical Company.

Neoprontosil from the Winthrop Chemical Company.

Setazine from Merck and Company.

Ultraviolet equipment from the Westinghouse Electric and Manufacturing Company.

\$200 for the study of experimental brain tumors from the American Medical Association.

\$4,500 for research on virus diseases from the Lederle Laboratories.

\$5,825 for the study of papilloma virus protein from the National Cancer Institute.

\$36,835 for experimental surgery from the Dorothy Beard Research Fund.

Obstetrics and Gynecology:

\$8,931 for fellowships, technical and secretarial salaries, and expenses of the Diagnostic Clinic from the Department of Obstetrics and Gynecology.
\$2,569 for endocrine research from Ciba Pharmaceutical Products.
\$8,534 for endocrine research from Ayerst, McKenna and Harrison.
\$4,614 for endocrine research from the Schering Corporation.
\$764 for endocrine research from Parke Davis and Company.
\$395 for endocrine research from E. R. Squibb and Company.
\$288 for endocrine research from the Upjohn Company.
\$100 for research from Dr. R. M. Lewis.
\$75 for endocrine research from the Cutter Laboratories.
\$182 for research from the Winthrop Chemical Company.

Pediatrics:

\$400 for salaries and expenses of the Diagnostic Clinic from the Department of Pediatrics.
Olac for the feeding of premature infants from the Mead Johnson Company.
Pertussis antigen for the immunization of infants from the Lederle Laboratories.
Bismuth violet for the treatment of skin infections from the Table Rock Laboratories.
Evaporated milk for the well-baby clinic from the Pet Milk Company.
Sulfapyridine and sodium sulfapyridine from the Calco Chemical Company.
Sulfapyridine from Merck and Company.

WILBURT C. DAVISON,
Dean.

THE SCHOOL OF FORESTRY

To the President of the University:

Herewith I submit the report for the School of Forestry for the academic year 1938-39. This report, covering the major forestry activities at Duke University, also includes accounts of progress and developments in the Duke Forest and the Arboretum. Now that the Graduate School of Forestry has been established and is functioning and our activities in forestry have become more diversified, it has seemed desirable to seek the assistance of other members of the Forestry Staff in the compilation of our annual reports. The section on the Duke Forest has been prepared by Professor William Maughan, Assistant Director of the Forest, who has been associated with the writer for the past nine years in the development of the Forest. To Professor Ellwood S. Harrar, who is in charge of the Arboretum, I am also indebted for the section on that activity.

EDUCATIONAL PROGRAM OF SCHOOL

The School of Forestry was opened in September, 1938, with twenty-one students enrolled. Eight of these men were granted the Master of Forestry degree last June, as they were graduates of other schools of forestry before coming to Duke. Men who do not have forestry degrees are required to spend two years in the Duke School of Forestry before they can qualify for the Master of Forestry degree. As in previous years a number of men were enrolled in the Graduate School with forestry as their major field of study. Some work in forestry is also being elected by students majoring in other fields.

No undergraduate degrees will be offered by the School of Forestry as students will be accepted for entrance only after they have received their Bachelor's degree from other universities or colleges, or have met the requirements of the four-year pre-forestry curriculum in Trinity College at Duke. The Master of Forestry degree will be available to such men in one or two years depending upon their previous training and their showing in the School of Forestry.

During the first year's operation of our School of Forestry it assumed both a national and international aspect. Last year's student body represented the states of Alabama, Arizona, Georgia, Indiana, New York, North Carolina, Maryland, Minnesota, Pennsylvania, Tennessee, Virginia, Washington, and West Virginia, and the following foreign countries: Canada, China, Dominican Republic, and Japan. Also present indications point to a widely representative student body for the School's second year.

All of last year's graduates are now constructively employed; three are teaching in undergraduate schools of forestry, two are engaged in research at one of the federal forest experiment stations, one is with a pulp and paper company, another is connected with the British Columbia Forest Service, and the other one holds a research fellowship at another institution.

The Faculty of the School of Forestry hopes that those of its graduates who are particularly well fitted for private employment, will find opportunities to enter the lumber, furniture manufacturing, paper, naval stores, creosoting, and other wood-using industries. Our School is expected to fill a definite need particularly in the South, where there has previously been no forestry school of graduate rank. The vast area of forest land in the South and the great economic and social importance of Southern forests emphasize the need for a school where men may obtain advanced training under Southern conditions for work in the Southern region. Not only in the South, but all over the United States, a greatly increased attention to forestry problems and soil and water conservation during recent years has stimulated the demands of both governmental and private organizations for better-trained foresters.

Last spring the students in forest utilization, under Professor A. E. Wackerman, took a field trip through the Coastal Plain of South Carolina and Georgia to see at first hand practical forestry as practiced by private owners and to see lumbering and other wood-using plants in operation.

The work of the Forestry School has been further strengthened and enlarged by the addition of Dr. James A. Beal to the School Faculty effective September 1, 1939. Dr. Beal, who comes to Duke from the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture, was trained at Massachusetts State College and the New York State College of Forestry, and has had experience in several forest regions of the United States, including the South.

I am glad to be able to report that the Duke School of Forestry, during its first year of operation, was accredited by the Council of the Society of American Foresters on recommendation of the Society's Committee on Accrediting Schools of Forestry. This means that it is recognized by the forestry profession and that all graduates of the School are, because of this accrediting, eligible for junior membership in the Society of American Foresters immediately upon graduation.

The equipment of the School has been further increased and its collections augmented. The installation of the dry kiln mentioned in last year's report has been completed, and drying schedules have been worked out under Professor Wackerman's supervision so that satisfactory drying of both pine and hardwood lumber is now possible in the University's own kiln.

The manufacturers of saws and other wood-working and forestry tools have quite generously donated samples of tools to the School for demonstrational use. A wide variety of forest products have also been obtained with the compliments of the manufacturers for display and for use in laboratory and classroom instruction.

WOOD COLLECTION

When the work in wood anatomy and properties was begun in 1936, the need for a large and representative collection of the timbers of the world immediately became apparent. There are numerous ways by which collections of authentic woods may be obtained. The most satisfactory and

least expensive method, however, lies in direct exchanges with persons or agencies anxious to obtain American materials—the procedure which Professor E. S. Harrar is following in building up our permanent collections.

In addition to an excellent collection of North American woods, which was the first to be assembled, we now have representative collections from Queensland in Australia, India, Mexico, Switzerland, northern China, Dominican Republic, and tropical America. The tropical American group is the finest single unit obtained to date and was procured from the Yale School of Forestry through the co-operation and generosity of its Dean, Dr. S. J. Record. This collection numbers over 600 specimens and includes species from 75 plant families representing 254 genera.

The permanent collection of the School now numbers over 2,000 authentic samples. Arrangements for making several exchanges have been completed and collections from other regions are expected.

SLIDE COLLECTION

Every workable wood collection should be supported by a slide collection in order that the minute structure of wood may also be made available for study. A permanent slide of wood consists of thin transverse, radial, and tangential sections, properly stained and mounted. Their preparation is a time-consuming process, but Dr. Harrar has made nearly 1,800 slides (including duplicates) since the fall of 1936. Most of these are woods of the American lumber trade, although a large number with peculiar anatomical features have also been prepared and are included in this count. A representative collection of 250 slides of tropical American woods was obtained from the Yale School of Forestry in exchange for slides prepared here, a set of slides of Panama woods, and another of Indian timbers were obtained during the year. Like the wood collection, the slide collection is also being enlarged as rapidly as slides can be made or exchanges arranged.

FUTURE NEEDS OF DUKE SCHOOL OF FORESTRY

The immediate needs of the School were stressed in last year's report. The most urgent need, that of enlarged quarters for the School, has been temporarily alleviated through moving the Duke Forest Office and most of the School offices to a suite of rooms on the ground floor of the newly completed dormitory for graduate and professional school students—Few Quadrangle, House G.G. Since no laboratory facilities are available in the new location it was necessary to retain the forest soils, forest entomology, wood technology, timber mechanics, silvics, and seeding and planting laboratories in the Biology Building. Although this arrangement involves some distinct disadvantages it is the best solution of our quarters problem that could be worked out until it is possible to construct and equip a new building designed to provide the space and facilities needed by the School.

The School of Forestry Library needs still further enrichment along the lines indicated in last year's report.

A number of contributors to the Centennial Fund of Duke University specified that their contributions should form the nucleus of a fund to be made available for loans to especially worthy students in the School of Forestry. As opportunity offers, this fund should be increased to such size that it will more adequately meet the needs.

Among other needs are increased resources for student scholarships and fellowships and for research by both students and Faculty members.

Although many forestry practices developed in the present Duke Forest in the Piedmont region of North Carolina can be applied to Coastal Plain forests, there is a distinct need for another school forest in the Coastal Plain where problems pertaining to this very important region, which includes forests of longleaf, slash, loblolly, and shortleaf pines, and bottomland hardwoods, can be studied and practical forest management measures perfected.

THE DUKE FOREST

The gradual development of the Duke Forest as a demonstration of intensive forest management continues as one of the major activities in Forestry at Duke University. During the year 1938-39 considerable progress was made toward reaching this objective by a continuation of those practices in the Forest which have been adopted from year to year and previously reported.

In making this report attention is drawn to the fact that under normal circumstances the placing of any considerable area under intensive management is a long-time undertaking. An effective protection system must be organized; open and idle lands must be planted or otherwise restocked with trees to bring all areas into production and build up growing stocks to the point of maximum production; existing stands must be treated to improve quality, composition, and growing conditions; overmature and ripe timber should be harvested; and sustained markets must be developed for all types of products to make economically possible many of the foregoing activities. The necessity and desirability of confining these activities within limitations imposed by a budget consisting primarily of net incomes from the area dictate a conservative program. It is felt that in so developing the Duke Forest, substantial progress has already been made and that under the present policies of management the Forest will materially increase in both value and usefulness from year to year.

PLANTING IN THE FOREST

During the year 1938-39 tree-planting activities were continued much as they have been in the past. A total of 65.07 acres of new plantations were established to raise the total area planted in the Forest since this activity was started in 1931 to 760.67 acres. As usual, loblolly pine was the principal species used, although more shortleaf pine and slash pine were planted this year than in several years past. A total of 80,860 trees were planted, of which approximately 55,000 were loblolly pine, 14,000 shortleaf pine, 4,000 slash pine, 4,400 yellow poplar, 2,000 red cedar, and the remainder black locust and dogwood. Of this number, approximately 61,000 were used in establishing new plantations, 4,000 to fill in failed

spots in existing plantations, and 16,000 to replant areas where unsatisfactory results have been obtained in past plantings. To date a total of 915,482 trees have been planted in the Forest, approximately 761,000 of which represent new plantations, 108,000 were used as refills, and 56,000 for replanting.

Continued co-operation received from the Soil Conservation Service of the U. S. Department of Agriculture has been responsible for much of the progress made on the planting program. During the past year the Soil Conservation Service provided C. C. C. labor to establish 21.8 acres of new plantations and to plant practically all of the 20,000 trees used in refilling and replanting, since most of such work was needed in plantations previously planted by this Service. The Soil Conservation Service supplied approximately 11,000 of the trees from their large tree nursery at Chapel Hill, while the Forest Staff provided the rest of the planting stock and, as usual, prepared the planting plans and assisted in supervising the work. All planting stock supplied directly by the Forest Staff was purchased from the Division of Forestry of the North Carolina State Department of Conservation and Development and came from the forest-tree nursery maintained by this state agency near Clayton, North Carolina.

Worthy of special mention in the 1938-39 plantings is an 11-acre experimental plantation of loblolly pine, shortleaf pine, and slash pine, established in co-operation with and at the request of the Nursery Section of the Woodlands Division of the Soil Conservation Service. The object of the planting is to study the effect on the growth and development of the three species of several different chemical treatments in the nursery seed-beds. Trees of each species were taken from nursery plots which had been subjected to four different chemical treatments as well as from untreated plots and so planted as to provide ten replications of each set to permit of statistical analysis of future results. Plans for the experimental planting were prepared co-operatively by Professors Korstian and Schumacher of the Duke School of Forestry, L. R. Roof, Manager of the Chapel Hill Nursery operated by the Soil Conservation Service, and W. C. Davis of the Division of Forest Pathology in the Bureau of Plant Industry. The trees came from the Chapel Hill Nursery and were planted by C. C. C. labor from the local Soil Conservation Service Camp with the Duke Forest Staff assisting in the supervision.

The red cedar plantation set out last year was enlarged this year by some 2,000 trees. Red cedar is a valuable commercial species as it can be used early in life for Christmas trees, a little later for posts, and as it matures for poles and sawlogs. Cedar brings a price which is becoming more and more attractive owing to the rapidly diminishing supply of naturally established stands in this region. The Forest Staff is planning to plant a limited amount every year that stock can be obtained and planting sites are available.

SILVICULTURAL OPERATIONS IN THE FOREST

Silvicultural cuttings of the types described in previous reports were continued during the past year on a more or less extensive scale. The

thinning of pine stands to improve conditions as to composition and growing space in these stands and to utilize material which might be lost through natural competition if thinning were neglected was carried out on 77.5 acres. This increases the total area thus treated to 634.5 acres. The principal products obtained from this operation are fuelwood, pulpwood, and poles.

The pruning of young second-growth pine stands to improve the grade of timber produced by the pruned trees was carried out on 30.1 acres, to raise the total acreage so treated to 204.1 acres. Of special interest in this operation was the fact that 17.1 acres of the pruned area was located in pine plantations established by the Forest Staff in January, 1931. Thus in eight growing seasons after being planted the trees had attained sufficient size to receive their first pruning.

Final cuttings, designed to obtain regeneration of the stands, were effected on 10.8 acres, of which 1.9 acres were cut clear, while on the remainder 4 to 12 seed trees per acre were left. One area, totaling 3.8 acres was cut over under the shelterwood method leaving 40 trees per acre over 7 inches in diameter at breast height. The selection system of cutting, in which individual trees are selected and marked for removal leaving the other trees to grow and develop for subsequent cuts, was used on 31 acres. In all, 104.2 acres have been thus treated since the Duke Forest was brought under management in 1931.

Of particular interest during last year's operations in the Forest was the establishment by the Appalachian Forest Experiment Station of the U. S. Forest Service of a series of six permanent sample plots designed for the purpose of studying methods of pulpwood cutting and their effect upon regeneration and future yields in the stands in question. The group of plots in the Duke Forest are part of a larger, similar study being carried on by the Experiment Station in several locations throughout the Piedmont Plateau and Upper Coastal Plain of North Carolina, South Carolina, and Virginia. It is hoped that one result of the study will be to test the effectiveness as a forestry measure of the cutting rules recently adopted by the Southern pine pulpwood industry. An attempt is also being made to develop other cutting practices which may be satisfactory in case the present ones prove ineffective.

On the 6 plots in the Duke Forest, all of which are located in loblolly pine stands, several methods of cutting have been applied, namely: clear cutting, leaving 4 seed trees per acre and leaving 12 seed trees per acre; shelterwood cutting, leaving 40 trees per acre; clear cutting to a minimum breast-high diameter of 7 inches; and thinning from below, both lightly and heavily. A total area of approximately 18 acres was involved in this experiment. The marketing, measuring, and taking of all records was done by the Experiment Station, while the supervision of the actual cutting operation and marketing of the product, 144 units of pulpwood, was handled by the Duke Forest Staff.

The number of permanent sample plots in the Forest was increased to 60 by the establishment of 9 new plots, each 0.5 acre in area, in a 12-year-old stand of loblolly pine (Stand 26, Compartment 58, Durham Division)

in need of thinning. The plots were divided so that on one-half of each plot the stand was thinned by the method known as "crown thinning" in which special attention is given to selected trees intended to become crop trees to keep them properly released and growing rapidly. On the other half of each plot the common method of thinning from below was used.

MARKETING OF FOREST PRODUCTS

The marketing of products from the Forest continues to expand and increase in importance. Eventually it is hoped to place the Forest on a continuous, sustained yield; cutting and marketing each year an amount equal to the annual growth, thus establishing the Forest as a going business. Owing to the presence within the original Forest area of a large acreage of open land not carrying timber stands and to various deficiencies of age distribution and stocking in existing stands, the maximum annual growth will not be attained for some period of time. In the meantime, it has, therefore, been necessary to expand the marketing program rather slowly. This has been done and will consciously be kept under control until the maximum production is reached.

Indicative of what can be expected in the future, depending upon the fluctuation of economic conditions, is the experience of the past year. Two new markets were developed, one for pine pulpwood and one for red cedar sawlogs to be used by the cedar chest industry. Whenever merchantable red cedar is available this is an excellent outlet, but the pulpwood market is somewhat problematical. It is expected that this market will fluctuate, sometimes being economically profitable and sometimes not, owing to conditions in the industry and to the rather long freight hauls from the Duke Forest to consuming plants.

In any integrated forestry business a complete diversification of products will lead to the soundest and most profitable marketing programs, and every effort is being made to reach all possible markets with products from the Duke Forest even though the volume of each product now available is relatively small.

Illustrative of the diversification now practiced, is the past year's marketing record. During the fiscal year 1938-39 there were cut and sold from the Forest 63,700 feet of pine sawlogs; 3,500 feet of oak sawlogs; 3,700 feet of black walnut veneer bolts for furniture; 18,150 feet of red cedar sawlogs for cedar chests; 2,700 feet of red gum sawtimber; 31,000 feet of yellow poplar veneer bolts; 312 pine poles (with a volume of 30,000 bd. ft.) to be creosoted and used for electrical transmission lines; 85 Christmas trees; 144 units ($1\frac{1}{4}$ cords per unit) of pine pulpwood; and 1,100 cords of fuelwood. Products shipped from the Forest during the year required $23\frac{1}{2}$ railroad cars, bringing to 43 the total number of carloads of products shipped from the Forest to date.

PROTECTION OF THE FOREST FROM FIRE

The forest fire record for the year 1938-39 is significant in that it illustrates to a remarkable degree the effectiveness of organized forest-fire protection activities. On the Durham and New Hope Creek divisions of

the Forest, where lookout and fire suppression efforts are adequately organized, only four fires occurred and the area burned over was held to less than one acre, 0.79 acre to be exact. On the Hillsboro Division, however, where little or no effective protection is available, the five fires that occurred burned over 29.64 acres before being brought under control. The average fire in the adequately protected area burned only 0.2 acre, while at Hillsboro the average fire covered 5.93 acres.

The fire situation on the Hillsboro Division and the lack of adequate protection are brought about through a combination of factors which make protection extremely difficult. Owing to the lack of funds with which to match county appropriations the Forestry Division of the State Department of Conservation and Development has not yet been able to admit Orange County into the Federal-State-County forest-fire protection organization that operates in many North Carolina counties, even though Orange has, in two successive budgets, earmarked funds for the county's share of fire protection costs. This means that Orange County has no detection service, and the Forest Staff is unable to learn of fires until some neighbor or passerby gets to a telephone and notifies the Forest Office. Since the Hillsboro Division is approximately 14 miles away this adds to the delay in getting suppression crews to the fires. The University holdings in the Hillsboro Division are so small, less than 500 acres, that a full-time resident watchman, guard, or patrolman is not financially justified, nor is the area large enough to satisfy the requirements of a State Auxiliary Game Refuge, which might decrease the number of hunters, fishermen, and other itinerant trespassers. The recent reopening of quarrying operations brings quite a number of people into the area, and, as a general thing, without adequate protection the more people, the more fires. It is hoped that Orange County soon can be brought under organized protection; then with a lookout tower for detection and available suppression forces, the forest fire situation on the Hillsboro Division should be relieved.

The largest fire on the Durham Division occurred on Sunday, April 23, the last day of the Centennial Celebration. This fire, originating on a neighbor's land and presumably caused by careless pedestrians, was brought under control by joint action of Duke Forest and Durham County suppression crews. The area burned in the Forest amounted to only two-thirds of an acre and resulted in but little permanent damage, although over 10 acres of the neighbor's land was burned and much of the young timber severely damaged. The other fires in the Forest this year were also caused by pedestrians, with none being charged against the railroad, a frequent offender.

PUBLIC USE OF THE FOREST

The first and foremost objective of the United States Forest Service in its stewardship of the National Forests is that these areas shall be so managed that they will be of "greatest use to the greatest number of people." In the attempt to achieve this objective, the Forest Service wisely recognizes that forested areas have many uses to offer to the public in addition to the production and protection of timber supplies. This has

resulted in the development of a so-called "multiple-use" program in which timber growing, watershed protection, game and fish propagation and protection, grazing, and public recreation, and other activities are all recognized and integrated in their proper relationship with one another. As a result of this policy the National Forests are perhaps the most useful of our National Reservations and the management has received the unqualified approval of the general public.

Although it is recognized that the development of such a program in the Duke Forest is not necessarily required nor implied, the Duke Forest Staff believes that, in a small way, the development of recreational facilities for the use of the general public, within controlled limits, will go a long way toward building up a spirit of friendliness and co-operation, or good will on the part of those in the University community and the local community in general, not only for the Forestry program, but also for the University as a whole.

With this in mind it is gratifying to record that the public use of the Duke Forest continues rapidly to increase. The five picnic sites maintained in the Forest were used during the year by 619 separate parties comprising a total of 7,321 people, or an average of approximately 12 persons to the party. This number of users represents an increase of approximately 31 per cent over the preceding year. The Gate 7 area and Piney Mountain were the most popular sites, nearly 2,200 using the former and 1,650 the latter. At least a thousand persons used each of the five sites.

The use of woods roads and bridle trails for horseback riding continues to increase with over 5,600 persons participating in this form of recreation. No estimate is available of the number of hikers using the Forest nor is a check maintained on the number using the W. A. A. Cabin or the Boy Scout Camp, both of which are located in the New Hope Creek Division. It is safe to estimate, however, that fully 15,000 persons used the Duke Forest for recreational purposes during the past year. It is worthy of mention that with this large volume of public use, little or no trouble is being experienced with forest fires. It is believed that this favorable condition exists because users of the Forest are becoming more and more conscious of its value for recreational purposes and the damage forest fires can do. A few cases are known where users actually put out a small fire before reporting it.

STATE GAME REFUGE IN THE FOREST

The original agreement between Duke University and the North Carolina State Department of Conservation and Development, whereby the area within the Durham and New Hope Creek divisions of the Duke Forest was established as an Auxiliary State Game Refuge expired on May 5, 1937. Realizing the many advantages obtained by virtue of the Game Refuge, negotiations were opened looking toward a renewal of the agreement, and after a rather careful investigation on the part of the Game Division of the Department of Conservation and Development the agreement was renewed for a period of ten years effective November 1, 1938.

Among other items, the effectiveness of enforcement activities by the State in the Refuge area was looked into during the Department's investigation, and, as a result, two State Game wardens from outside of Durham and Orange counties have been assigned part-time to this Refuge to assist local wardens in enforcement work. These men have a roving commission and are in and out of the Refuge indeterminately. It is expected that enforcement will improve as a result of this action.

The lands of several neighbors and one tract owned by the Erwin Cotton Mills on New Hope Creek have also been included in the Refuge to round out an effective, more easily protected unit.

THE FOREST AS A DEMONSTRATION CENTER

One of the three principal objectives in the organization of the Duke Forest, that of demonstrating to foresters, timberland owners, educators, farmers, and others the application of approved forestry practices, is well on its way toward realization. Each year more and more people visit the area to observe the manner in which the Forest is being operated, to learn of improved techniques, and to study results achieved.

As usual, classes from the New York State College of Forestry, at Syracuse University and from the Division of Forestry at North Carolina State College spent one or more days here. A group from the School of Forestry at Yale University also spent a day here en route to their spring field camp in Louisiana.

Notable among visitors from foreign countries were: W. W. Gay, Conservator of Forests, Melbourne, Commonwealth of Australia; J. N. Finlayson, Dean of Applied Science, University of British Columbia, Vancouver, British Columbia, Canada; Dr. Rudolf Marcus, University of Riga, Riga, Latvia; Mr. Inche Kosai, Malay States; and Mr. Elwood Wilson of Canada, then with the Pack Forestry Foundation.

ARBORETUM

Continued progress is being made in the development of the School of Forestry Arboretum. There are now 40 permanent plantings in this area although some of them have failed to become established and their survival seems doubtful. Three transplant beds contain 103 species, many of which will be ready for their final placement in the Arboretum area next spring. A fair percentage of survival seems assured for 44 species growing in the seedbeds this year.

During the year two shipments of seed were received from the Arnold Arboretum. Owing to the quantity of seed obtained and the lack of facilities for proper handling here, it was turned over to Mr. F. J. LeClair, observational nurseryman for the Soil Conservation Service, at Chapel Hill, North Carolina. Mr. LeClair has kindly agreed to handle this seed for us with the understanding that he is to receive specimens of everything which he is able to germinate. Some of this material has now gone through one growing season and will be transferred to the Arboretum in the spring.

A small shipment of plants was also obtained from the state nursery

at Mont Alto, Pennsylvania. In most instances only two or three specimens were included so that it will be necessary to obtain additional planting stock of these items to carry out the original plan of group plantings.

A master plan depicting present and proposed developments in the area has been completed. A supply of planting stock will still be available for some time, but to care for it properly becomes more of a problem each year owing to the restricted budget upon which the Arboretum is operated. The continuous increase of planting stock results in greater demands for labor during the entire growing season, and the need of a full-time plant propagator is beginning to make itself keenly felt. Another item of even greater importance at the moment is that of a suitable water system in the area. At the present time water is inaccessible to all but a few of the permanent plantings and some of the stock which has been lost can be traced directly to drought. As more permanent plantings are made, the need for an adequate supply of water becomes more acute. Finally, in order to propagate certain plants from cuttings a small greenhouse is needed equipped with cold frames, and propagating benches with controls for top and bottom heat.

FORESTRY RESEARCH

Members of the Forestry Staff have continued their intensive program of research, and during the past year a number of projects were completed and the results prepared for publication. Also several new projects were initiated.

Professor Harrar has completed the necessary tests in a study dealing with the mechanical properties of compression and tension wood. His study of foreign and domestic cabinet woods is progressing satisfactorily. One paper dealing with hardness has already been submitted for publication. A series of glue tests has been completed. At this writing the screw-holding capacity of these woods is being investigated as well as their behavior under changes in atmospheric humidity. An exhaustive study of the contents of septate fibers has been made, and the manuscript practically completed.

A study of fiber length in loblolly pine as affected by site, dominance, and position in the tree has been completed by a graduate student, Mr. J. S. Bethel. Mr. Bethel is also conducting a study of the relation between stand density and quality of wood produced in young loblolly pine stands.

Several of the research projects in forest pathology mentioned in last year's report as being under way have resulted in publications by Professor F. A. Wolf and his students. Studies of brown spot of pines caused by *Septoria acicola*, of a leaf disease of oaks caused by a fungus commonly known as *Aulographum quercinum*, and of a foliage disease of holly caused by *Macroderma curtisii* will be completed during the coming year. Substantial progress has also been made in a study of a complex of leaf diseases on ash seedlings in nurseries and in the forest. One of the organisms concerned is *Piggotia fraxini*. This study will probably be terminated next spring.

Professor R. B. Thomson completed an investigation of the economics of forest valuation. This research consisted of tracing historically the development of several German theories of forest valuation and subjecting them to rigorous logical analyses from an economic point of view. Professor Thomson intends to conduct further research in the application of these principles for the purpose of guiding landowners in making intelligent policy decisions pertaining to the practice of forestry.

The investigation of soil changes associated with the succession of loblolly pine in the Piedmont Plateau has been completed by Professor Coile, and a manuscript is now being prepared for publication. The results of this study are a contribution to our knowledge of the casual factors involved in the succession of forest communities on land once cultivated. During the year a report was written on the influence of forest stand composition on fertility in the surface soil in the Duke Forest. Work is being continued on this study both in the Duke Forest and at other places in the region. A report on the influence of incorporated organic matter on some moisture-holding characteristics of different mineral soils was presented before the meeting of the Soil Science Society of America in November.

PUBLICATIONS

A number of articles of a scientific or technical nature, based upon research, were written during the year by members of the Faculty of the School of Forestry or by graduate students. Papers by Faculty members published during the year are included in the list of publications appended to the report of the Chairman of the University Council on Research, in this bulletin.

Two bulletins in the Duke School of Forestry series were published during the year; Bulletin 2, *Fungi of the Duke Forest and their Relation to Forest Pathology*, by Professor F. A. Wolf in collaboration with K. H. Garren and J. K. Miller, and Bulletin 3, *Plant Competition in Forest Stands*, by Professors Korstian and Coile.

NATIONAL YOUTH ADMINISTRATION ACTIVITIES IN FORESTRY

A considerable number of investigative, research, and administrative projects in Forestry were continued and furthered during the 1938-39 school year by virtue of the continuance of the Federal Government's program of providing funds for assistance to college students under the National Youth Administration. It should be emphasized here that projects carried out with this assistance would not have been possible with our limited funds if such help had not been available.

A total of 3,807 man-hours were devoted to Forestry work during the past school year, which is an increase of 1,170 man-hours, or 44.4 per cent, over the amount that was available during the preceding year. Of the total, 2,399 man-hours were spent in work in the Forest with the remaining 1,408 man-hours being devoted to inside projects. In the Forest, four principal projects were carried on, namely: remeasuring and re-marking existing permanent sample plots and establishing several new

ones; pruning of young pine stands to expand a study of pruning as a silvicultural operation; conduct of a tree-seedling-establishment study on cut-over areas; and continuation of a branch study as a part of a larger study of competition in natural loblolly pine stands. In addition to the four main projects, numerous smaller studies were carried out, consuming from 7 to 39 man-hours each.

The inside work consisted primarily of drafting of maps and charts, research assistance in the wood technology laboratory, calculation and tabulation of management and research data, and general office work.

STAFF ACTIVITIES

Members of the Forestry Staff, in addition to their regular duties, continue to take an active part in the work of outside professional and scientific organizations concerned directly or indirectly with forestry or allied sciences.

Members of the School of Forestry Faculty have been appointed on subcommittees of a Committee of the Society of American Foresters on Revision of Forestry Terminology, as follows: Professor J. A. Beal, Forest Entomology; Professor E. S. Harrar, Wood Technology; Professor William Maughan, Forest Management; Professor F. X. Schumacher, Forest Mensuration; and Professor A. E. Wackerman, Forest Utilization.

Professor Coile presented a paper on the classification of forest sites with special reference to ground vegetation at a joint summer meeting of the Canadian Society of Forest Engineers and the Society of American Foresters in conjunction with the American Association for the Advancement of Science in Ottawa, Canada, on June 30, 1938. During July and August, 1938, Professor Coile made an extensive reconnaissance of the soils of the red spruce cut-over lands of the Southern Appalachian Mountains. The purpose of the survey was to classify the soils developed at high elevations whose characteristics might be related to the success or failure of forest plantations there established. A paper on podzol soils in the Southern Appalachian Mountains was given before the annual meeting of the Soil Science Society of America. In June, 1939, Professor Coile initiated a problem analysis of forest soil research in the eastern half of the United States at the request of the Branch of Research of the United States Forest Service. During the second semester of 1938-39 Professor Coile was on leave and attended Yale University, from which institution he received a Ph.D. degree in June, 1939.

Professor Harrar is now serving as Acting Secretary-Treasurer of the International Association of Wood Anatomists.

Professor Maughan was on leave during the first semester of 1938-39 and attended the University of Michigan, where he took special graduate work in his field, Forest Management, under Professor D. M. Matthews of the School of Forestry and Conservation, one of the foremost authorities on forest management in the United States. While at Ann Arbor, Professor Maughan completed his task of collecting data and editing a *Guide to Forestry Activities in North Carolina, South Carolina, and Tennessee*.

This work was published by the Appalachian Section, Society of American Foresters in January, 1939, and has met with much favorable comment in conservation circles.

Professor Schumacher spent six weeks during June and July acting as consultant in connection with various problems of experimental design and analysis for the Department of Forestry Relations of the Tennessee Valley Authority.

Professor Thomson was also awarded a Ph.D. degree by Yale University in June, 1939, having fulfilled the residence requirements before coming to Duke.

In connection with a vacation trip to Minnesota last summer Professor Wackerman spent some time in studying modern developments in the harvesting and utilization of Lake States forests.

Professor Korstian addressed the joint dinner meeting of the Canadian Society of Forest Engineers, the Society of American Foresters, and the Woodlands Section of the Canadian Pulp and Paper Association in Ottawa, Canada in June, 1938, on the subject "Present and Future Trends in the Forestry Profession," and, as President of the Society of American Foresters, presided over one of the joint sessions. Following these meetings he spent several weeks studying forest conditions and silvicultural practices in the Province of Ontario and in the states of Minnesota, Wisconsin, and Michigan. In December, 1938, Professor Korstian was elected Vice-President of the American Forestry Association and of the Ecological Society of America.

Mr. C. M. Henninger resigned as Forest Assistant on the Duke Forest Staff on March 25, 1939, to accept a position in Tennessee with the U. S. Soil Conservation Service. He was replaced temporarily by W. R. Boggess, V. G. Watkins, and Thomas G. Wright, graduate students each of whom devoted part time to the work.

CLARENCE F. KORSTIAN,
Dean.

THE SUMMER SCHOOL

To the President of Duke University:

The twenty-first session of Duke University Summer School closed on September 2. There was a decline in enrollment of 244 students the first term and of 72 the last term, besides a decline of 43 at Junaluska. This decline, however, was in line with the general decline of summer enrollments and still left the Summer School with an increase as compared to two years ago. The decrease in enrollment resulted naturally in taking better care of the students who were here. This was true in the recreation program, in the library facilities, in the class enrollments, and markedly in the matter of supervising Master's theses. The summer was more nearly free from strain on the part of most students and Faculty than any session of the preceding ten years.

As to the cause for the decline in enrollment, it is hard to give any one explanation. The fact that other university summer schools of the Southeast, of the New York area, and of the Middle West had similar decreases in enrollments has led some observers to think the summer school enrollment of public school teachers has passed its peak. It is entirely possible that the better tenure provisions in certain states, including some represented heavily in our enrollment, and the increased difficulty during the depression teachers have had in leaving the classroom for other occupations have tended to retard the movement of teachers to summer school: the old teachers who have largely completed their summer school attendance are holding their positions, and the young teachers who are employed already meet the higher requirements. Personally, I do not believe the number of teachers likely to attend summer schools is in any permanent decline. Our own losses were heaviest in Georgia (where many teachers had not received their salaries since March) and in depressed areas of South Carolina and Florida. Conditions in these three states I hope are merely temporary. It is also noteworthy that our decrease was heaviest in graduate courses dealing with current historical and similar problems and in undergraduate courses for teachers. Since the undergraduate teachers (that is, teachers who quit college before completing their four-year course and began work in the elementary schools, usually on the basis of completing a two-year normal course) and graduate teachers particularly interested in current events are those to whom a summer of travel and the type of easily obtained information available at a World's Fair would most appeal, it seems plausible to assume that the New York and the San Francisco fairs probably accounted in part for decreases in enrollments. There is also some evidence of a two-year cycle of increase in our summer enrollment—a large increase in 1936, practically no increase in 1937, another large increase in 1938, and the loss in 1939.

The decrease at Junaluska, however, is a different matter. The analysis of the enrollment there shows 35 Haywood County teachers as compared to 63 a year ago; 49 undergraduate college students as compared to 66 a

year ago; 19 School of Religion students as compared to 17 a year ago; and 35 teachers from outside Haywood County as compared to 39 a year ago. The decline in Haywood County teachers was not by choice of the teachers, but by reason of the fact that the teachers of Haywood County have had the type of course we are prepared to offer at Junaluska. When we organized the Junaluska Summer School, Haywood County stood ninety-second from the top among the hundred counties of the state in the average preparation of its teachers. It now stands somewhere in the upper 25 per cent. Most of the Haywood teachers, as a large majority of the other teachers of the state, now need and desire graduate courses. Even those teachers who have not yet obtained certificates of Class A have either had all the courses we have worked out for offering off our campus or under the present requirements of the State Department must comply fully with requirements for the baccalaureate degree before they can obtain the higher certificate. They must therefore go to summer school where they can complete all required junior and senior courses for the A.B. or B.S. degree. We are not prepared to give advanced courses at Junaluska. Although it is clear enough to us why we cannot give this advanced work away from our campus, the Haywood teachers and our other friends there are annually disappointed that more work is not offered at Junaluska. This seems to be the principal explanation why the Junaluska enrollment dropped from 205 in 1937 to 185 in 1938, and to 141 in 1939. It is an even question whether under changed circumstances we do not lose more good will by trying to continue the Junaluska Summer School than we would by saying frankly that we have made our contribution and see no reason to continue. The forty-nine college students were chiefly Duke students taking courses which were also offered on the Duke campus and were not crowded. They could have been cared for on the Duke campus without additional instructional staff for the Duke University Summer School. Most of the \$1,500 they paid in fees was therefore in the nature of additional contribution made by the Summer School to Junaluska. The 1939 theological students were chiefly from the Duke University School of Religion, and probably the majority would have preferred to have courses offered on the Duke campus; but it has been the policy of the Duke University Summer School not to offer religion courses in competition with the Junaluska School of Religion. If these nineteen students had been transferred to the Duke campus it would have necessitated transferring two teachers in religion to care for them. Four or five of the nineteen quite possibly would not have enrolled on the campus, but there probably would have been ten to fifteen additional students desiring Master's courses in religion, who could not be accommodated at Junaluska because the courses there carry credit only for the A.B. or B.D. degree. It should also be pointed out that if and when the work at Junaluska is discontinued, the Department of Botany should be encouraged to maintain, as demand may arise, a summer camp to continue the field courses that have been given so acceptably by Drs. Blomquist, Oosting, and Anderson.

The summer school calendar is still a problem. The Housing Bureau needs an extra day between closing the religious institutes after Com-

mencement and the opening of the summer session, and also between the first and last terms of the summer session. If we put in these two days, we can obtain terms of full six weeks each only by closing the last term Tuesday after Labor Day, which is a bad date for practically all of our summer school students who are teachers in the public schools. On the other hand, since we have a four-day allowance of absences, the beginning of classes for the first term on Wednesday instead of Tuesday would enable students whose schools close as late as the second Friday in June to enter as late as the third Tuesday following Commencement (since there are no classes on Monday during the Summer School) instead of entering the second Saturday following Commencement, with the possibility of complete credit for the first term. Furthermore, since we now require thirty-three weeks to complete the Master's degree, we could without inconveniencing any large number of students, except for the first summer or two after the change is made, close the second term at the end of five weeks, simply allowing five semester hours of credit for the five weeks term instead of six semester hours for the six weeks. Students who wish to attend for the entire summer would then meet residence requirements in three summers and be less rushed at the end of summer school than at present. Assuming that June 1 is the first Sunday in June, the earliest possible date that Commencement can come under our present rules, this would mean registration on Tuesday, June 10, for the first term and the first class period June 17 as the latest possible time of entrance for credit. In this case the first term would complete classes Tuesday, July 22. Registration for the last term would be Wednesday, July 23. Classes would begin Thursday, July 24, and the five weeks' term would end Wednesday, August 27. If, however, the first Sunday in June should fall on June 7, the latest possible date, all the assumed dates would move forward six days and the five weeks term would end on Wednesday, September 2, which would still be more than a half week before Labor Day and the opening of most of the schools Tuesday or Wednesday following. We have also experimented somewhat satisfactorily with a three weeks' extension of the first term of Summer School, by which we have offered a single course both early and late periods and permitted students from the six weeks term to stay over for three additional weeks. Since these courses have continued work offered during the six weeks, and have naturally held many of the better students enrolled in the first term, they have been very satisfactory to the teachers offering them, and we had more than a hundred enrolled in four such courses last summer. If the last term were cut to five weeks and more of the three weeks extended courses offered, it might solve the calendar problem. After all, the only people interested in twelve weeks during the summer are those working intensively toward a degree, and many of these, perhaps a majority, would prefer to work in periods of nine and eleven weeks rather than twelve weeks per summer.

During the summer of 1939 the first examinations for the Master of Education degree under the new requirements were given to certain students who transferred from the old requirements to the new. The comprehensive examinations were given on four reading courses dealing re-

spectively with the school as an institution, the nature, function, and organization of the curriculum, the psychological principles of education, and the methods, procedures, and evaluation of educational research. Examinations were also given on the major and minor of each student. Although one student failed his minor examination, and two their majors, there were seven candidates for the Master of Education degree who completed under the new requirements. The members of the Staff giving the examinations are on the whole pleased with the system and its results as compared to the thesis normally required for the Master of Education degree.

I again call attention to some of the problems involved in the mechanics of awarding degrees to students who complete their requirements in Summer School. The student who completes his requirements July 25 or September 1 normally will ask permission to receive his degree *in absentia* the following June. He is not present to make contribution to the Commencement occasion, and he has the inconvenience of going without his degree for nine or ten months after he has earned it. There is also the embarrassment to the University of sometimes explaining how the student received both the Bachelor's and the Master's degrees at the same commencement, when in fact the University is strict about permitting a student to take both graduate and undergraduate work at the same time. There is the further fact that as a matter of sentiment the student who because of illness or of changing his course, or for other reason, graduates in the summer, prefers to be enrolled in the alumni records as belonging to the Class of 1939 with which he in fact has spent his four undergraduate years, instead of being listed ever after as belonging to the Class of 1940. It would seem to be desirable to have a meeting of the proper University Faculty in the early fall to vote on the degrees earned during the summer and have an executive committee or some other committee of the Board of Trustees act on behalf of that body if it does not have an appropriate meeting to consider the list. At the annual commencement the program could carry notation that the "following" degrees were earned the preceding summer and voted by the Faculty and Trustees in the autumn semester. Of course the diplomas would have to be mailed out to the recipients just as they are mailed to those who graduate *in absentia*, but the actual number mailed would not be greatly increased. These suggestions do not contemplate a summer school commencement, for which I see no compelling reason. In the first place, it would be hard to maintain a dignified occasion when both Faculty and students are hurrying away after a busy summer. In the second place, conditions would make improbable a satisfactory gathering of alumni. In the third place, at that time of year there is really no opportunity for the kind of dignified educational advertising that commencements theoretically accomplish; the minds of hundreds of thousands of students and parents the country over are directed toward the opening of schools and not the closing.

The Summer School of 1939 employed on its Instructional Staff 180 persons (counting each man employed full time for six weeks as one instructor and counting him twice if he happened to work twelve weeks).

Of these, 115 were members of the Duke University Staff, 52 others had taught in previous terms of Summer School, and 13 were visiting instructors teaching their first term in Duke University Summer School. Visiting men teaching advanced courses the past summer were drawn from such widely scattered institutions as the University of Pennsylvania, Southeastern Louisiana College, Swarthmore College, the University of South Carolina, the University of West Virginia, the University of Wisconsin, the University of North Carolina, the University of Michigan, Davidson College, the University of Virginia, New Jersey College for Women, Ohio State University, College of the City of New York, Catawba College, Mercer University, Union College, Southern Methodist University, University of Illinois, University of North Dakota, University of Georgia, Texas Christian University, Georgia State Woman's College, East Carolina Teachers College, University of Chattanooga, Johns Hopkins University, Louisiana State University, the University of California, Stanford University, and the University of New Mexico.

The past Summer School showed enrollment of 3,015 made by 2,448 students, this latter figure being obtained by counting only once students who enrolled for more than one term of six weeks (as compared with 3,375 enrollment in 1938 made by 2,742 students). There were in addition to these 3,015 registrations, 158 students enrolled in the Schools of Medicine and Nursing, making a total of 3,273 registrations for the summer session, or 2,606 individual students. Of these registrations, 1,933 students were enrolled in the first term of the Summer School, and 941 in the second term, 141 in the Junaluska Summer School, Inc., and 158 in the Medical School and the School of Nursing. Of the total registrations, 1,380 in the first term, 609 in the second term, and 70 at Junaluska were by teachers in the public schools, a total of 2,059 as compared with 2,484 in 1938. Leaving out of consideration students of professional schools and those enrolled at Junaluska, we had the distribution of graduate and undergraduate students shown in Table 1. Eleven graduate students and one undergraduate student were enrolled at the Marine Laboratory the first term. Thirteen graduate students and one undergraduate were enrolled there the second term.

TABLE 1

NUMBER OF GRADUATES AND UNDERGRADUATES, MEN AND WOMEN, ENROLLED IN SUMMER SCHOOL, 1939

	<i>Men</i>		<i>Women</i>		<i>Total</i>		<i>Total Registrations</i>
	<i>I</i>	<i>II</i>	<i>I</i>	<i>II</i>	<i>I</i>	<i>II</i>	
Graduates.....	556	308	607	270	1,163	578	1,741
Undergraduates.....	336	176	434	187	770	363	1,133
<i>Total</i>	892	484	1,041	457	1,933	941	2,874*
Total 1938, for comparison..	890	486	1,287	527	2,177	1,013	3,190*

*These totals do not include the Junaluska registrations of 141 in 1939 and 184 in 1938.

Graduate students again constitute slightly over 60 per cent of the total enrollment. There was a decrease of 199 graduate registrations and of 117 undergraduate registrations as compared with 1938. The total number of men in 1939 was precisely the same as in 1938, there being a gain of two men in the first term and a loss of two in the second. The decrease of 316 women leaves more than 48 per cent of the summer school enrollment consisting of men. In the graduate enrollments there were 864 men and 877 women. The decline of 128 in the undergraduate enrollment of women reflects the decreased number of undergraduate teachers enrolled this summer.

Table 2 gives the distribution of undergraduate students among the twenty departments offering undergraduate work.

TABLE 2
DISTRIBUTION OF UNDERGRADUATE STUDENTS BY DEPARTMENTS, 1939

<i>Department</i>	<i>I</i>			<i>II</i>			<i>Grand Total</i>
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	
Education.....	8.0	110.5	118.5	17.0	75.0	92.0	210.5
Chemistry.....	33.5	6.0	39.5	14.0	2.0	16.0	55.5
Civil Engineering	52.5	...	52.5	...	...	...	52.5
Economics.....	42.0	46.0	88.0	15.0	9.5	24.5	112.5
English.....	39.0	77.0	116.0	42.5	25.5	68.0	184.0
Forestry.....	1.5	...	1.5	1.0	...	1.0	2.5
French.....	16.0	21.5	37.5	10.5	4.0	14.5	52.0
German.....	24.0	2.0	26.0	2.0	3.0	5.0	31.0
Greek Literature	10.0	3.0	13.0	16.0	9.0	25.0	38.0
History.....	25.5	46.5	72.0	24.5	21.0	45.5	117.5
Hygiene and Health.....	15.0	14.5	29.5	...	...	...	29.5
Mathematics....	1.0	1.0	2.0	.5	1.0	1.5	3.5
Physics.....	11.0	3.0	14.0	2.5	2.0	4.5	18.5
Political Science	10.5	22.5	33.0	6.0	11.5	17.5	50.5
Psychology.....	2.5	14.0	16.5	...	.5	.5	17.0
Religion.....	14.0	21.5	35.5	2.5	2.0	4.5	40.0
Sociology.....	6.0	35.0	41.0	7.0	14.0	21.0	62.0
Spanish.....	20.5	9.5	30.0	13.5	7.0	20.5	50.5
Zoology.....	2.0	...	2.0	1.0	...	1.0	3.0
Physical Education.....	1.5	.5	2.0	.5	...	.5	2.5
<i>Total.....</i>	336.	434.	770.	176.	187.	363.	1133.

The departments more heavily enrolling undergraduate teachers suffered losses as follows: Education, 70.5; Sociology, 45; Religion, 28; Political Science, 18; and History, 15. English, on the other hand, gained 11.5 undergraduate students over 1938; Spanish, 12; Zoology, 9; Chemistry, 8.5; and French, 8.

Table 3 shows the distribution of graduate students by departments. The enrollments listed in Engineering, Hygiene, Forestry, and German were wholly by graduate students enrolled in undergraduate courses. As

compared with 1938, the enrollments show a loss of eleven graduate men in the first term, 160 graduate women the first term, 28 graduate women the second term, and the same number of graduate men the second term as the year before. The departments suffering the heaviest losses were Education, 98; French, 36.5, leaving only 39; History, 25; Psychology, 14, leaving only 17; Political Science, 11; and Chemistry, 8.5. Botany had a gain of five students, due to the enrollment at the Marine Laboratory. Spanish gained 8.5 students as compared with 6.5 in 1938. There

TABLE 3

DISTRIBUTION OF GRADUATE STUDENTS BY DEPARTMENTS, 1939

<i>Department</i>	<i>I</i>			<i>II</i>			<i>Grand Total</i>
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	
Education.....	288.0	280.0	568.0	172.5	125.0	297.5	865.5
Botany.....	6.0	3.0	9.0	4.0	10.0	14.0	23.0
Chemistry.....	7.0	9.5	16.5	.....	.....	.....	16.5
Civil Engineering.....	2.5	.....	2.5	.....	.....	.....	2.5
Economics.....	25.0	10.5	35.5	11.5	3.0	14.5	50.0
English.....	51.0	143.5	194.5	44.5	72.0	116.5	311.0
Forestry.....	1.5	.....	1.5	2.0	.....	2.0	3.5
French.....	7.5	21.0	28.5	3.0	7.5	10.5	39.0
German.....	9.5	6.0	15.5	.5	.....	.5	16.0
History.....	55.0	61.0	116.0	24.0	30.0	54.0	170.0
Health and Hygiene.....	.5	1.0	1.5	.....	.....	.....	1.5
Mathematics.....	27.5	23.0	50.5	10.0	4.5	14.5	65.0
Nutrition Research.....	.....	1.0	1.0	.....	1.0	1.0	2.0
Physics.....	8.0	.5	8.5	2.0	1.0	3.0	11.5
Political Science.....	14.0	6.0	20.0	2.5	.....	2.5	22.5
Psychology.....	6.0	5.0	11.0	4.5	1.5	6.0	17.0
Religion.....	7.0	2.5	9.5	1.0	.....	1.0	10.5
Sociology.....	23.0	16.0	39.0	16.0	8.0	24.0	63.0
Spanish.....	3.0	9.0	12.0	1.0	2.0	3.0	15.0
Zoology.....	14.0	8.5	22.5	9.0	5.5	14.5	37.0
<i>Total.....</i>	<i>556.</i>	<i>607.</i>	<i>1163.</i>	<i>308.</i>	<i>270.</i>	<i>578.</i>	<i>1741.</i>

were no other marked losses or gains by departments. Of the graduate students, 95 were working full-time on Master's theses in Education, 27 in English (of whom 16 were in American Literature), 13 in History, six in Zoology, five in Chemistry, four in French, four in Religion, and twelve others divided among the departments of Botany, Economics, Mathematics, Physics, Political Science, and Sociology. The thesis students in American Literature were principally those who started their work while Dr. Hubbell was working full-time in the Summer School. The demand, however, by high-school teachers of English the country over for work in American Literature and the resulting rapid growth of the departments of American Literature in the summer schools of the universities all over the country have made it exceedingly difficult either

to keep our own staff in American Literature for the summer or to obtain outstanding men who can leave their own institutions often enough to maintain the continuity of work we try to maintain in our Summer School. If the conditions of the last two years continue this summer, we should probably announce in our next bulletin that we have discontinued American Literature as a major for the Master's degree in summer school. It would be ironical to discontinue a course because of its popularity. But frank discontinuance would cause less embarrassment than offering a disjointed or inadequate program.

The graduate students of 1939 were admitted from 301 colleges in 33 states, Puerto Rico, and four foreign countries. The entire student body represented 375 colleges in 35 states, the District of Columbia, Puerto Rico, Hawaii, and four foreign countries. Within the past six years the Summer School has drawn students from every state in the Union except Wyoming. One hundred and eighty-one registrations this past summer were by students who had already received Master's degrees from the following institutions: Birmingham-Southern, Bucknell University, Columbia University, Cornell University, Duke University, Emory University, George Peabody College, Harvard University, Iowa State University, Kansas State Teachers College, North Carolina State College, Ohio State University, Ohio University, Oklahoma A. & M. College, Purdue University, Southern Baptist Theological Seminary, Southern Methodist University, Syracuse University, Texas College of Arts and Industries, Texas Technological College, Tulane University, the University of Akron, the University of Alabama, the University of Arkansas, the University of Chicago, the University of Colorado, the University of Florida, the University of Georgia, the University of Iowa, the University of Kansas, the University of Kentucky, the University of Mississippi, the University of Missouri, the University of New Hampshire, the University of North Carolina, the University of Pittsburgh, the University of Richmond, the University of South Carolina, the University of Tennessee, the University of Virginia, Virginia Polytechnic Institute, Washington University, West Virginia University, and Western Reserve University.

Table 4 shows the distribution by classes of Duke students and alumni attending the Summer School of 1939. This table counts as Seniors only those students who could complete graduation requirements by the end of the summer, and counts as Juniors all others who have completed three or more years of work; as Sophomores those who have completed two years; and as Freshmen those who have been one year at Duke. The number of Duke alumni and students has risen slowly but steadily from 579 in 1936, to 649 in 1937, to 654 in 1938, to 668 in 1939. The gain in 1939 was in the Junior Class. There were nine students (seven men and two women) the first term and eighteen (sixteen men and two women) the second term who entered on the basis of their high-school diplomas.

Excluding the enrollment from professional schools, the summer enrollments by states sending more than one hundred students each were

TABLE 4

DISTRIBUTION OF DUKE ALUMNI AND STUDENTS ENROLLED IN THE
1939 SUMMER SCHOOLS

	<i>I</i>			<i>II</i>			<i>Grand Total</i>
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	
Masters.....	10	9	19	8	6	14	33
Graduates.....	25	25	50	18	11	29	79
Seniors.....	44	11	55	25	4	29	84
Juniors.....	103	25	128	68	16	84	212
Sophomores.....	61	41	102	20	15	35	137
Freshmen.....	70	18	88	25	10	35	123
<i>Total.....</i>	313	129	442	164	62	226	668

North Carolina 621, as compared to 713 last year (forty of this loss being at Junaluska); Pennsylvania 472, as compared to 468 last year; South Carolina 261, as compared to 292; West Virginia 252, as compared to 286; Florida 230, as compared to 292; Georgia 161, as compared to 224; Virginia 152 as compared to 159; Ohio 106, as compared to 86; and Tennessee 101, as compared to 134. This group of nine contiguous states contributes over 80 per cent of our total enrollment in the graduate and undergraduate schools. The following states each contributed more than thirty students: New York 96, as compared to 84 last year year; New Jersey 82, as compared to 99; Mississippi 91, as compared to 99; Maryland 64, as compared to 68; Kentucky 56, as compared to 83; Alabama 49, as compared to 66; and Louisiana 32, as compared to 27. When the enrollments from these seven states are added to the enrollments from the first nine, we have a compact group consisting of Ohio and the Middle Atlantic and Southeastern states that furnish nearly 97 per cent of our enrollment in graduate and undergraduate schools during the summer. Enrollments from other states, the District of Columbia, Puerto Rico, and foreign countries were as follows: Arizona, 1; Arkansas, 18; California, 2; Colorado, 2; Connecticut, 18; Delaware, 16; Illinois, 23; Indiana, 5; Iowa, 3; Kansas, 4; Maine, 4; Massachusetts, 10; Michigan, 11; Minnesota, 1; Missouri, 9; Montana, 2; New Hampshire, 5; New Mexico, 2; Oklahoma, 6; Rhode Island, 2; South Dakota, 1; Texas, 25; Washington, 4; Wisconsin, 5; District of Columbia, 9; Puerto Rico, 1; Canada, 1; China, 3; Dominican Republic, 2; and England, 3. North Carolina was represented by registrations from 78 of the 100 counties. Within the past six years 95 counties have been represented in the Summer School. The heaviest losses in enrollment from North Carolina were from Durham County, which for the first term fell from 118 to 92, Granville from 12 to 4, and Guilford from 20 to 10. On the other hand, Wake increased from 14 in the first term of 1938 to 22 in the first term of 1939, Davidson from 6 to 10, Edgecombe from 4 to 12, Forsythe from 7 to 13, and Gaston from 5 to 9. The enrollment included

public school teachers from twenty-eight states and the District of Columbia.

The enrollment of the first term of 1939 included 412 men and 443 women who had attended at least one preceding term of the Duke University Summer School. These 855 students, chiefly graduate students working for degrees, had attended an average of nearly three terms each. They give the Summer School a continuity of spirit and attitudes it could not otherwise maintain. For the first time in the history of the Summer School there was in attendance no one from the Summer School of 1919, the first the University ever conducted; but there were two students in attendance who had entered the Summer School in 1920, and every other summer school held on the Duke campus since 1919 was represented in the enrollment. Since students working for the Master's degrees must complete their work within six years, and since it is usually convenient for them to come the same term each summer, it is interesting to observe the students returning from each succeeding first term of the last five years to the first term of 1939, as follows: from 1934, 41; from 1935, 101; from 1936, 202; from 1937, 327; and from 1938, 623. After making allowance for students intending to complete degrees at the University who for some reason could not return this summer or desired to take the summer off, I judge that about 60 of these from 1935, about 125 from 1936, 225 from 1937, and possibly 400 from 1938, intend to complete degrees in the Summer School. Those returning from 1934 had to complete this summer because of time limitation, and the same limitation will drive those from 1935 next summer. Several students entering in 1934, 1935, and 1936 completed Master's requirements this summer, besides a few who entered in 1937. The latter, of course, had to spend the entire summers of 1937, 1938, and 1939 in order to complete their degrees. It will be observed that we may expect a steady rise in the number of Master's candidates as indicated by the number of students indicating a desire for sequence of summer courses. It becomes increasingly important to provide adequate supervision for graduate work in the Summer School. It appears that approximately 200 students are planning to complete Master's degrees in the summer of 1940.

HOLLAND HOLTON,
Director.

THE UNIVERSITY LIBRARIES

To the President of the University:

During the academic year 1938-39 there were acquired by the libraries of the University a total of 40,578 additional volumes. The distribution of this increase and the total holdings of each are displayed in the following table:

TABLE 1

	<i>Accessions 1938-39</i>	<i>Total Number of Volumes 1938-39</i>
General Library	30,695	429,082
Hospital Library	1,437	36,596
Law Library	3,617	61,403
Woman's College Library.....	4,829	42,637
	<hr/> 40,578	<hr/> 569,718
Deducting volumes lost and withdrawn and duplicate accessions.....		578
Total number of books in all the libraries of Duke University through June 30, 1939.....		<hr/> 569,140

In addition to these increases in the number of bound volumes there were 46,230 additions to the manuscript collection, bringing the total number of manuscripts to 580,682. The total number of periodicals and newspapers regularly received is as follows:

TABLE 2

General Library		Law Library	
Newspapers	58	Newspapers	8
Periodicals	2,187	Periodicals	237
	<hr/> 2,245		<hr/> 245
Hospital Library		Woman's College Library	
Periodicals	291	Newspapers	18
		Periodicals	216
			<hr/> 234
<i>Total</i>			3,015

This represents a total increase of 62 titles over the comparable figure for the previous year.

EXPENDITURES

The expenditures for books, bindings, and periodicals during the academic year 1938-39 and its distribution among the several libraries were as below:

TABLE 3

General Library	\$ 96,398.02
Law Library	14,671.69
Hospital Library	4,824.01
Woman's College Library.....	8,964.58
<i>Total</i>	<hr/> \$124,858.30

These funds were derived from the following sources:

TABLE 4

Budget funds appropriated to the several libraries.....	\$ 75,703.89
Library Fee funds	22,045.42
Income from endowed book funds.....	894.05
Contributions by friends.....	20,480.29
Funds from Division of Co-operation in Education and Race relations	202.31
Summer School Funds	2,169.30
Special Library Fees in particular courses.....	2,681.24
Lost Book Fund.....	681.80
<i>Total</i>	<u>\$124,858.30</u>

One notes from this table that 20 per cent of the total book expenditures or 26 per cent of the expenditures of the General Library were derived from sources other than those of regular University income.

This is virtually the same figure as was reported last year, in spite of the expiration of the General Education Board Grant. If one will compare this figure with those for 1929 and 1930, the percentage is encouraging, but it must be recognized that it is due primarily to the generosity of members of the family of the late Colonel Flowers. Income available from endowed book funds totaled only \$891. In comparison with many other libraries this is our great weakness.

THE USE OF THE LIBRARIES

In the last report I called attention to an increase in use of library materials. This increase has continued in all of the libraries but one. In the case of the Woman's College Library there is recorded an increase in the use of books within the building but a decrease in the use outside the building. This latter is large enough to result in a small decline in the total recorded circulation for the libraries as a whole. Why this particular figure declined to such an extent is not known. The matter will be watched carefully to determine if the decline in the recorded circulation at this point represents a real reduction in the amount of reading done and, if so, to take steps to reverse the trend. The recorded circulation figures of all the libraries are presented in the following table as a matter of record:

TABLE 5

GENERAL LIBRARY, 1938-39

Main Circulation Desk—Two weeks books.....	105,342
Undergraduate Reserve (Open shelves).....	30,317
Graduate Reserve (Open shelves).....	19,148
School of Religion (Open shelves).....	27,818
Total for General Library.....	<u>182,625</u>

HOSPITAL LIBRARY

No record kept

LAW LIBRARY

Books lent for use outside building.....	19,310
--	--------

WOMAN'S COLLEGE LIBRARY

Books lent for use outside building and from reserve shelves including those lent for overnight use.....	104,551
Total recorded book loans.....	306,486

NOTABLE ACQUISITIONS

It is always a pleasure to list some of the more notable acquisitions of the year. In doing so, however, the statement must be repeated that the book-buying policy is to purchase those books which will be of value for scholarly and scientific purposes. Among the more important items secured during the year were the following:

Almanach royal. 1762-1888.

A series of annual handbooks of facts about the organization and personnel of French governmental, educational, and commercial institutions.

Archives curieuses de l'histoire de France depuis Louis XI jusqu'à Louis XVIII. 25 vols.

A miscellaneous collection of chronicles, memoirs, correspondence, etc., prepared by the staff of the Bibliothèque Royale to supplement the collections made by Guizot, Buchon, Petitot, and Leber.

Bibliothèque des écoles françaises d'Athènes et de Rome. 97 vols.

Contains all the more important publications of these two schools which have been in existence since 1846 and 1874 respectively.

British Parliamentary Papers. 1926 to date.

These contain, in about fifty volumes annually, the official "blue books," "white papers," "command papers," committee reports, and other material closely concerned with matters actually before the two houses of Parliament.

Catalogue of Books Printed in the XVth Century now in the British Museum. 7 vols.

A detailed bibliographical guide to the British Museum's famous collection of incunabula. Prepared under the supervision of A. W. Pollard and published by the Museum.

Catalogue of the Eumorfopoulos Art Collection. 6 vols.

A beautifully illustrated catalog of one of the finest collections of Chinese, Korean, and Persian pottery and porcelain in existence.

Cabrol, Fernand, *Dictionnaire d'archéologie chrétienne et de liturgie.* 13 vols.

An encyclopedia of signed articles on Christian antiquities covering the period from the beginnings of the Church to the time of Charlemagne.

Dinglers Polytechnisches Journal. 1820-1931.

A German periodical dealing with technology and industrial arts. Originally a monthly, it began to appear weekly in 1882.

L'enseignement mathématique. 1899 to date.

Switzerland's only separate mathematical periodical, setting forth the activities of the Société Mathématique Suisse and the Société Suisse des Professeurs de Mathématique.

Gallia Christiana novissima. 7 vols.

A continuation of the original *Gallia Christiana* previously acquired.

Germanische Studien. 200 nos.

A series of monographs continuing the Germanic section of the *Berliner Beiträge zur germanischen und romanischen Philologie*.

The Holy Bible, conteynyn the Old Testament, and the New. Imprinted at London by Robert Barker, 1611.

The first edition of the authorized or King James version, known as the great "He Bible" because of the misprint of "he" for "she" in Ruth 3:15.

Italian Parliamentary Papers. 1848-1922.

A monumental set of almost one thousand volumes, complete from the organization of the first Italian Parliament in 1848. Formerly in the private library of Italian Foreign Minister Baron Sidney Sonnino.

Journal asiatique. 1822 to date.

A complete file of this famous journal, the foundation of any research collection for Oriental studies. Now in its 230th volume.

Journal of Mental Science. 1853 to date.

A British periodical dealing primarily with the pathological phases of psychology. Published by authority of the Medico-psychological Association of Great Britain and Ireland.

Legge, James, *The Chinese Classics.* 5 vols.

The definitive translation of the classic works of Confucius, Mencius, and other Chinese philosophers.

Medina, José Toribio, *Biblioteca hispano-americana (1493-1810).* 7 vols.

The magnum opus of one of the foremost American bibliographers, listing some eighty-five hundred titles with extensive annotations.

Medina, José Toribio, *La Imprenta en México (1539-1821).* 8 vols.

A bibliographical work of increasing scarcity. In addition to the 12,412 titles listed, it contains a historical sketch of printing in Mexico.

Mercure françois. 1605-48.

A series of twenty-five volumes containing original sources and secondary material pertaining to the reigns of Henry IV and Louis XIII. One of its compilers was the versatile Théophraste Renaudot.

Die neue Zeit. 1883-1923.

An important journal of German socialistic thought. Significantly discontinued in 1923.

Obergermanisch-raetische Limes des Römerreiches. 56 parts.

A series of exhaustive studies on the Limes Germanicus, the fortified frontier of the Roman provinces of Upper Germany and Rhaetia. Issued by the German Reichslimeskommission.

Revue socialiste. 1885-1914.

One of the more important French radical journals. Discontinued with the outbreak of the last European war.

Scottish History Society. *Publications.* 113 vols.

A series which carries out the original program of the society: "the discovery and printing, under selected editorship, of unpublished documents illustrative of the civil, religious, and social history of Scotland."

Scrittori d'Italia. 166 vols.

A uniform collection of the works of the standard Italian writers.

Tectona. 1908 to date.

A Dutch forestry periodical published in Buitenzorg, the capital of the Dutch East Indies.

French Revolution Finance.

A collection of some four hundred items, mostly pamphlets, dealing with various phases of public and private finance at the time of the French Revolution.

Renaissance Humanists.

About one hundred original editions of the works of various Renaissance writers, including many lesser known authors, to supplement our previous holdings in this period.

THE GEORGE WASHINGTON FLOWERS COLLECTION

It has been a great source of satisfaction to those who had watched the growth of the Flowers Collection under the direction of Dr. W. K. Boyd to note the scholarly discrimination with which Professor R. H. Woody has carried on the work of building up this great collection. During the course of the year he has added 67,457 items to the Collection. These are classified as follows: manuscripts 45,949; newspapers 17,000; books and pamphlets 4,508; maps 38; broadsides 201; sheets of music 846.

In his annual report Professor Woody makes the comment, "It is amazing to me, as it was to Professor Boyd, that the supply of valuable manuscripts is not more nearly exhausted." The reader who examines the list of the year's acquisitions cannot but share this feeling. Among the larger selections secured were the following:

The Campbell Correspondence.—This is a collection of over eight thousand pieces covering nearly a century of the history of a distinguished Virginia and Tennessee family. One Campbell was governor of Tennessee and another of Virginia during the ante-bellum period. Besides private and family correspondence the collection includes many letters of high government officials, senators, and presidents.

The John R. Vinton Papers.—John Vinton, a native of Rhode Island, was a major in the United States Army. As a young man he was stationed at various points in Georgia, Florida, and North Carolina. He distinguished himself in the Mexican War only to meet his death at Vera Cruz in 1847. The collection includes correspondence and his journals and letter books from 1817 to 1847.

The Bolling Correspondence.—The Bolling family of Virginia was closely related to the Randolphs and hardly less distinguished. More than eight hundred letters over a period from 1790 to 1830 reveal much of the political and social life of the period.

The Simpson Papers.—This collection is comprised of the letters, legal correspondence and case notes of W. D. and J. W. Simpson, of South Carolina. The papers cover the years 1838 to 1880.

The Terrasson Papers.—Consisting of nearly nine hundred papers from the commission merchants Antoine and Barthelmy Terrasson, this group of letters reveals much of the economic life of the early Republic. Settling at Yorktown, the Terrassons soon had branches of their business at Charleston, Baltimore, Alexandria, and Philadelphia.

The Jarratt Correspondence.—The Jarratts dabbled in almost everything. This collection of over two thousand letters includes those of slave traders, commission merchants, legislators, and simple country people of the Old South. A large part of these papers consist of remarkable series of letters from the Jarratt children at the University of North Carolina and the answers of their parents.

The Rives Correspondence.—Over a thousand letters of the distinguished Rives family of Castle Hill, Albemarle County, Virginia, have been added to the collection.

The Schley and Towner Letters.—This is a fine group of letters emanating largely from Shepherdstown, West Virginia, and Frederick,

Maryland. The most remarkable run in the collection is a series of letters written by a member of the family while a soldier in Texas during the Mexican War.

The Ramsey Papers.—This collection includes two distinct groups of papers. The first relates to the Reverend James B. Ramsey, Virginia Presbyterian minister, and includes many of his family letters and manuscript sermons during the Civil War. The second is composed of the letters of his son George J. Ramsey, post-war educator in Tennessee, Kentucky, and Louisiana.

Among the materials secured in lesser quantity were one or more items from the following: Albert Pike, of Arkansas; Emma D. E. N. Southworth and Thomas Nelson Page, of Virginia; Paul Hamilton Hayne, of South Carolina. Of particular interest in this group is a long and detailed account of a Civil War battle by Mrs. Southworth, namely, The Second Battle of the Manassas, August 29, 1862. Political and military history is well represented. Outstanding figures represented in the acquisitions include William L. Yancey, Andrew Johnson, James Gadsden, L. Q. C. Lamar, Nathanael Greene, Richard Caswell, Zebulon Vance, and John Randolph of Roanoke. Some important letters from the following military leaders have been acquired: Robert E. Lee, Braxton Bragg, G. T. Beauregard, Jubal A. Early, and Gideon J. Pillow.

Of the books and pamphlets added to the Collection probably the most outstanding item was a copy of Nicholas Trott's *The Sons of the Province of South Carolina*. This book was long thought to be the first published in South Carolina. Research has revealed a number of ephemeral items and three pamphlets published before this time, but the volume's intrinsic importance remains undiminished. With it is bound *The Acts of the General Assembly 1733-36* and the same for 1737. Although not a perfect copy this one compares favorably with others of the less than twenty now extant, and possesses unusual association value in that it belonged to Charles Pinckney, Chief Justice of South Carolina, and bears his book-plate.

Among other outstanding items should be mentioned copies of the laws of North Carolina of 1794 and 1797, a copy of the United States Census returns for 1790 (Philadelphia, 1791) signed at the end by Thomas Jefferson, copies of the Latin edition of Thomas Harriot's *Voyages to America* with the De Bry engravings (Frankfort, Germany, 1590-91); an unrecorded copy of Thomas Paine's *American Crisis* (Charleston, 1778), and a number of rare antislavery and Confederate items.

Among the additions of magazines and newspapers to the Flowers Collection were also some of exceptional interest. Complete runs of *The Colonizationist and Journal of Freedom* (Boston, 1833-34), *The Wesleyan Anti-Slavery Review* (Boston, 1838), and the *South-Western Monthly* (Nashville, 1852) were secured. Scattered numbers of several elusive but important women's publications include issues of *The Ladies Pearl* (Nashville, 1854), *The Guardian* (Columbia, Tennessee, 1841), and *The Family Companion and Ladies' Mirror* (Macon, Georgia, 1841). Representing the interests of children were *Burke's Magazine for Boys and*

Girls, Burke's Weekly for Boys and Girls, and Kind Words (Macon, Georgia, 1871).

Many interesting items were secured in the newspaper field, which must pass unmentioned. One must be listed. A file was secured of *The Pulaski Citizen* of Pulaski, Tennessee, which runs from January, 1866, to the middle of 1938. Only about a half-dozen numbers are missing. It was in Pulaski that the Ku-Klux Klan was founded. In addition to this newspaper file, it should be remarked the Flowers Collection secured during the year a copy of the first edition of the Constitution of the Klan. Only two other copies of this edition are known to exist.

The Manuscript Department reports that during the course of the year sixty-seven scholars utilized that part of the Collection in connection with their researches. This represents an increase over all previous years. In addition, thirty-two scholars made a partial use of the Manuscript Collection through correspondence with members of the Staff. Separate figures are not available for the use of the books, pamphlets, and newspaper portions of the Collection.

Professor Woody has prepared a table setting forth the growth of the Flowers Collection since its establishment in 1931. To indicate the extent of this remarkable collection, as well as the stages of its growth, this table is reproduced herewith.

TABLE 6
STATISTICS OF THE FLOWERS COLLECTION, 1931-39

Year	Newspapers	Books and Pamphlets	Manuscripts	Maps	Broad-sides	Music	Totals
1931-32.....	11,964	1,400	24,309	..	...	...	37,673
1932-33.....	20,788	2,100	67,512	..	...	...	90,400
1933-34.....	10,228	7,401	24,823	..	...	...	42,452
1934-35.....	27,000	6,832	51,010	..	...	...	84,842
1935-36.....	10,000	4,473	42,354	..	...	...	56,827
1936-37.....	2,889	1,740	55,117	..	...	...	59,746
1937-38.....	12,892	1,614	92,624	43	175	287	107,130
1938-39.....	17,000	4,508	45,949	38	201	846	67,457
Totals 1931-39	112,761	30,068	403,698	81	376	1,123	546,527

THE CENTENNIAL EXHIBIT OF THE FLOWERS COLLECTION

For a number of years an exhibit of the materials which have been acquired for the Flowers Collection has been called for, and the Centennial Celebration of the University furnished a proper occasion for this to be done. To display selections from the more than half million items which constitute the collection called for facilities which the Library did not possess. The problem of space for the exhibit was solved by moving the periodicals elsewhere and converting the Periodical Room into an exhibit room. That part of the exhibit dealing with the history of education in North Carolina and in particular the development of the University was placed in the Woman's College Library. The selection, arrangement,

and description of the materials exhibited was the work of Dr. Nannie Tilley, assisted by Mrs. Mary Elizabeth Boyd Hamilton and Miss Ellen Frey and other members of the Staff. Mr. W. G. Land was in charge of the physical arrangements of the exhibit and prepared the catalog.

The exhibit was on display from March 31 to June 6. A total of 6,950 individuals visited the exhibit. The largest attendance on a single day was not during the Centennial Celebration proper but during the Commencement occasion. On June 4, there were four hundred visitors. The exhibit served not only to give some indication of the wealth of the Flowers Collection but also the need of more adequate facilities for library exhibit purposes.

DEPARTMENTAL LIBRARIES

Organized as a part of the General Library are the four scientific libraries and the Library of the School of Religion. These are usually referred to as the departmental libraries, but three of them have always served a group of departments. The Biology Library serves the Departments of Botany and Zoology and the School of Forestry; the Engineering Library cares for the needs of the several engineering departments, and the School of Religion Library supports the work of the various subdivisions of that school. These three are really divisional libraries. This policy of grouping departments so far as library facilities are concerned is undoubtedly sound, since it avoids to a considerable extent the difficulties and obvious defects of an extreme departmentalization of library resources. During the course of the year this policy was extended to another of these libraries, when the mathematics books were added to the Physics Collection. This union was a happy affair throughout. The Physics Department gallantly made the proposal, the Mathematics Department graciously accepted, and all the Library Staff did was to assist in the arrangements to the best of its ability. There is every prospect that the merger will be a permanent one.

The holdings of these departmental or divisional libraries at the close of the fiscal year were as follows:

TABLE 7

	<i>Volumes</i>
Biology	21,898
Chemistry	9,234
Engineering	5,447
Physics-Mathematics	4,739
School of Religion	27,067

Most of these departmental libraries are in excellent condition and face no serious problems. Two of them, however, have special needs. The Biology Library is filled to capacity and is too small also to provide reading space for the considerable number of students and Faculty members who make use of it. Some of these difficulties could be solved by the removal of infrequently used materials to the General Library, were not the latter approximately in the same condition. Probably some temporary solution to the book problem can be found, but a more serious problem is that of reading space. The danger in postponing too long the expansion

of this reading room is that the present crowded condition may result in efforts to subdivide the Library, a solution which will involve increased cost for supervision, maintenance, and purchase of duplicates.

The Library of the School of Religion also needs some attention. The School, enrolling annually over a hundred students on the graduate level, bases its work to a very large extent on the Library. The reading room is small and poorly ventilated, and a number of desirable facilities such as carrels for advanced work, space for display of periodicals, etc., are lacking. This problem cannot be solved easily at the moment, and it appears wiser to await the expansion of the General Library than to engage in architectural reconstructions which may not be final. We can, however, assist the School in another way, namely, by providing a librarian who will have had special training in the curricular of the School and who can give to it a specialized service. This library, in my opinion, should always be maintained as a part of the General Library, since the study of religion will always involve the extensive use of the historical and philosophical sections of the main collection. A librarian definitely related to the School of Religion and trained in its work could, however, adjust the book resources on the campus to the special uses of the School in innumerable ways and make a valuable contribution to its work. The distinguished service of Mr. Roalfe to the Law School, as well as the work of the librarians of the Divinity Schools of Yale University and the University of Chicago, give a pattern for this work.

THE ENLARGEMENT OF THE BUILDING

The need for additional space for storing books has already been stated and need not be repeated in detail. During the course of the year approximately 12,500 volumes were moved out of the General into the Woman's College Library, in addition to about three thousand bound volumes of newspapers. This latter move means that about half of the newspaper collection is now on the East Campus. With this move and some space which still was left, we believe that room can be found for the normal expansion of this year and the next. After that the books must be put on the floor or moved out of the building or additional construction provided. It should be added that the Librarian of the Law Library reports that the same condition exists as regards that library. The crowded condition of the Biology Library has also been referred to in this report.

This is not the place to discuss alternative solutions to this urgent problem nor to present detailed plans for the enlarged facilities which are needed. Some of these data have been presented in a supplementary report. I shall only repeat at this point that the problem is by no means merely one of book storage but also of seats for readers and of a rearrangement of the space for the working staff. It is to be hoped that a benefactor may soon be found, who will make it possible for the Library to continue the magnificent development it has enjoyed and to increase its usefulness to the University and the region.

THE STAFF AND ITS WORK

The most important change in the Staff has been the appointment of Mr. J. P. Breedlove to the position of Librarian Emeritus and Mr. John J. Lund to that of Librarian. Mr. Breedlove has the distinguished record of having served as Librarian of Trinity College and of Duke University for forty-one years. During all of that period no one could have given a more loyal or more devoted service. Under his direction the Library multiplied many times, and its Staff increased from, as he has put it, "myself and a colored boy" to sixty-two full-time workers. He supervised three transfers of the entire Library. The present appointment is a source of great satisfaction to his colleagues on the Staff, for it enables him to continue his active duties, yet with a sharing of the many responsibilities which he had carried so successfully for more than four decades. We look forward to his celebration of his fiftieth year in active service.

His successor, Dr. John J. Lund, came to us in 1938 from the University of California at Los Angeles. He received the degree of Doctor of Philosophy from the University of Chicago in the field of Comparative Philology and his certificate in Library Science from the University of California. Within the two years that he has been with us he has won the esteem and affection of the Staff, and it is with general satisfaction that he takes over the duties which Mr. Breedlove has in part relinquished.

To take the place of Dr. Lund in the Order Department I am pleased to announce the appointment of Dr. Mortimer Taube. Dr. Taube's academic training was received at Harvard, and the University of California, the degree of Ph.D. in Philosophy having been conferred by the latter. His library training was received also at the University of California. He comes to us from the library of Rutgers University, where he has served as Revisor of Cataloging and Classification.

This appointment gives me the occasion to review the progress which has been made in recent years in developing the scholarly equipment of the Library Staff.

It is obvious that many questions arise in the purchase and handling of recondite or highly specialized materials which cannot be dealt with except by someone who knows something about the subject involved. With this in mind, efforts have been made to secure a certain number of individuals who would combine a knowledge of library processes with a thorough knowledge of some portion of the literature with which the Library must deal. The Manuscript Department has always been fortunate in that it has been in the charge of Dr. Ruth Nuernberger, whose training in Southern history was secured under Dr. W. K. Boyd. For the last several years she has been assisted by Dr. Nannie E. Tilley, who has been trained in the same field. In other departments of the Library we have secured the services of Dr. Gustave Nuernberger, whose special field is history and related social sciences, Dr. Lund, whose degree was secured in philology, and Miss Ellen Frey, who holds an advanced degree in English literature and is pursuing work toward the doctorate. The appointment of Dr. Taube, who had proceeded to the doctorate in the field of philosophy, will further enrich the Staff. It is not expected that any of

these Staff members will take the place which Faculty members have always played in the development of the Library, but they should supplement the work of the latter and serve as points of vital connection between the Library and the departments, besides contributing to the intellectual life of the community.

In addition to their regular duties, members of the Staff have contributed to the work of the library profession in various ways. Dr. Lund has translated at the request of the Carnegie Corporation the volume by Wilhelm Munthe, *American Librarianship from the European Angle*. He also presented a paper at the annual meeting of the American Library Association. Miss Evelyn Harrison served as Treasurer of the North Carolina Library Association. Mr. Roalfe has served on committees of the Association of American Law Schools and the American Association of Law Libraries. He has also contributed a series of three articles to the *American Bar Association Journal*. Miss Mary Covington of the Law Library has been chairman of a committee which has prepared lists of books recommended for bar libraries in North Carolina, and has also served on committees for the Association of Law Libraries. Miss Marianna Long has prepared a useful Check-List of the Publications of the American Law Institute. Miss Katherine Day has prepared a Check-List of Cumulative Indexes to Current Anglo-American Legal Periodicals. Dr. Tilley has published an article in *The American Historical Review* dealing with certain aspects of Confederate diplomacy. The writer has served on the Committee on Resources of the American Library Association, and has brought to completion his study of college libraries prepared for the Association of American Colleges.

HARVIE BRANSCOMB,
Director.

THE DUKE CHAPEL

To the President of the University:

The office of Dean of the Chapel is so integrally related to the development of Duke University Church that I make no attempt to separate the two.

In one of the preliminary meetings leading to the organization of the Church, the question was sharply raised as to why such an organization was desirable. A student from the Woman's College made this instant reply: "We students are very proud of our stately Chapel, and we like to attend the Sunday services in it. We get a good deal of good out of them. But we do not somehow feel that we 'belong' there; everything is so impersonal. We want something to belong to, something that is really our own. We want a church of our own here on our campus."

There, I think, is the first and greatest reason for the launching of this enterprise. But there is another important reason also, and that is that a definite church organization would help to give unity and force to various religious efforts on the campus.

From the beginning of Duke University, religious efforts have been going on. First, the Young Men's and the Young Women's Christian Associations have been doing good work year after year. And then, largely through their agency two fairly vigorous Sunday School classes have been in constant operation. More recently, denominational groups have come into being. Notable among these are the Methodist, the Presbyterian, the Episcopalian, the Baptist, the Catholic, and the Jewish, with other smaller groups getting under way.

The Y. M. C. A. and the Y. W. C. A. are essentially interdenominational in character, and could maintain themselves with some efficiency without much regard to the other organizations. But even their work can be made more effective when they are closely correlated with other religious groups. It is not surprising therefore that these agencies were among the prime movers in bringing about the Religious Council and the University Church. One Y. M. C. A. officer seemed to voice the opinion of his whole group when, in speaking about the church project, he said, "What we want is some kind of general clearinghouse for all our religious life and activities here." The Religious Council was designed to be such a clearinghouse, and it was fitting that the Council should be incorporated bodily as the student's section of the Official Board of the newly-formed Church.

In its structural aspect, Duke University Church (Interdenominational) rests upon all the denominational and interdenominational student bodies now at work on the campus. These groups maintain their entity just as they did before the Church was formed, and they are duly represented in the student section of the Official Board of the Church through the Religious Council, in the manner referred to. It is expected that the Church will give every incentive possible to the denominational and the

interdominational groups to keep vigorously at work. On the other hand, it is hoped that these groups will get strongly under the church enterprise, both in recruiting its membership and in making its projects work out successfully.

Duke University Church is not exclusively for students, although they have been primarily responsible for its creation. The students themselves feel that the organization must be balanced by members and officers who represent the Faculty and administration groups. A set rule provides that the chairman of the board and the secretary shall be elected from the resident group, whereas the vice-chairman shall be a student. The method of recruiting the nonstudent side of the church membership and of establishing its representation in the Official Board has not as yet been fully worked out.

Duke University Church faces the problem of all churches as to what shall constitute a proper program of activities for its members. In addition to encouraging the religious groups referred to, it is hoped that the Church can in a more general way enter into worth-while programs of activity. Indeed, it has already made a beginning by assuming responsibility for the Huckabee Fund, a missionary project in Japan of special interest to Duke University because Mr. and Mrs. Huckabee were at one time connected with our student body. A strong suggestion has come from the students that this "foreign" enterprise be balanced by a like effort in some suitable "home" field.

My first year's service in this office was of routine character and need not be stated in detail. I have functioned a good deal of the time as chairman of the Church's Official Board, and also of its Executive Committee. In this double capacity I have planned as carefully as I could, with the advice of the Board members, for the normal expansion of our church structure and functions.

A notable development of last year was the establishment of an Easter cycle of services, under the direct supervision of Professor H. E. Spence. Another development that should be mentioned is the monthly collection in the Sunday morning service of worship for the support of "Duke in Japan" and the other enterprises which the Church is trying to establish. As during the other years in my duties of preacher to the University since the Chapel was opened I have this year preached, on an average, twice a month at the Sunday morning service.

FRANK S. HICKMAN,
Dean.

DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS

To the President of the University:

The increase in the number of students in the University and a marked growth of interest on the part of students in the whole program make growing demands on the Department. To increase the facilities necessary to meet these demands plans are now being prepared to enlarge the Gymnasium by the erection of a large building to be connected with the one built some ten years ago. The new building will serve many purposes of the Department and will afford comfortable seats for thousands of spectators at basketball games. This very popular sport has had for years here inadequate space. The building is to be erected from funds that have come to the University through the Division of Athletics. More tennis courts and better ones are now under construction and will create further interest in this great sport. A larger swimming pool, probably an outdoor one, will have to come before long. Students want bowling alleys beyond what are now available, a golf links, pool and billiard rooms. A good golf links, costly both in the making and maintenance, is very desirable. We use now for our golf teams the links at Hope Valley; other students play there and at Hillandale.

The work carried on by the Department is of a threefold nature: the required two years of physical and health education, for Freshmen and Sophomores; the voluntary but extremely popular intramural sports program for all students; and intercollegiate sports for those who wish to engage in them under the regulations of the University and the Southern Conference. The reports to the Dean of the work for the year 1938-39 will reveal that there is here a widespread participation by students in sports of a healthful nature and of a kind that will offer them the opportunity to continue such helpful exercise in later life.

For the year under discussion the reports on the two-year program of required physical education in Trinity College—Freshmen and Sophomores—show the distribution in the various courses offered as follows:

TABLE 1

REQUIRED COURSES OFFERED AND STUDENT ENROLLMENT BY SEMESTERS
1938-39

<i>Course</i>	<i>Fall</i>	<i>Spring</i>	<i>Year</i>
Apparatus Stunts	18		18
Band	58	40	98
Baseball	33		33
Basketball	104	35	139
Boxing	45	15	60
Corrective Gymnastics	28	29	57
Golf	24	75	99

Handball	95	60	155
Soccer	35	45	80
Softball		18	18
Swimming	84	81	165
Touch Football	108	42	150
Tennis	189	116	305
Tumbling Stunts	9	18	27
Track	89	59	148
Wrestling	9	22	31
<i>Total</i>	928	655	1,583

TABLE 2

SPORTS

(Elective in Freshman and Sophomore Years)

	<i>Fall</i>	<i>Spring</i>	<i>Year</i>
Freshman Basketball		26	26
Freshman Boxing		9	9
Freshman Cross Country.....	14		14
Freshman Football	61	37	98
Freshman Swimming		10	10
Freshman Tennis		11	11
Freshman Track		29	29
Freshman Wrestling		6	6
Lacrosse		6	6
Varsity Baseball		26	26
Varsity Boxing		8	8
Varsity Cross Country	14		14
Varsity Football	47	30	77
Varsity Golf		8	8
Varsity Tennis		5	5
Varsity Swimming		16	16
Varsity Track		20	20
Varsity Wrestling		6	6
<i>Total</i>	136	253	389

It should be noted that most of this work is done outdoors and is in some sport. The fundamental thought is to provide both healthful and pleasurable as well as useful exercise in which the student engages with many of his fellows. He learns the fundamentals of several sports under the direction of a competent instructor, and actually participates in the sport as exercise.

The intramural program of physical exercise and sports is entirely voluntary, but it appeals to all students and has become extremely popular. The director of this program handles it with the assistance of a student board, clear rules are set forth in a pamphlet, and all competitive sports among the students within the College are administered by these regulations. A report of the sports engaged in under these regulations show the distribution for the year as follows:

TABLE 3
PARTICIPANTS IN INTRAMURAL SPORTS, 1938-39

Organization	Badminton	Horseshoes	Football	Fall Tennis	Fall Handball	Cross Country	Boxing	Wrestling	Basketball	Swimming	Folleyball	Soccer	Life Saving	Spring Tennis	Spring Handball	Track	Golf
Alpha Tau Omega.....	46	16	14	31	29	6	1	3	15	1	40	22	2	48	48	...	4
Beta Theta Pi.....	7	4	...	...	...	...	...	...	...	10	...	...	...	6	...	...	...
Delta Sigma Phi.....	3	3	20	6	2	...	...	...	8	13	24	...	...	3	2	...	...
Delta Tau Delta.....	11	11	19	11	7	...	...	7	17	23	17	...	...	11	6	...	...
Kappa Alpha.....	5	3	16	12	2	...	...	...	11	...	18	...	2	16	2	...	...
Kappa Sigma.....	3	3	26	30	28	...	1	1	24	...	27	21	...	33	34	...	4
Lambda Chi Alpha.....	6	...	19	33	32	1	...	8	14	...	20	24	...	23	10	...	6
Phi Delta Theta.....	5	...	17	11	14	...	...	6	12	...	...	33	...	8	10	10	8
Phi Kappa Psi.....	9	...	12	18	11	...	1	...	12	...	8	...	2	13	3	...	...
Phi Kappa Sigma.....	11	22	14	8	8	...	1	...	15	2	18	...	...	10	5	6	...
Pi Kappa Alpha.....	10	15	13	24	3	...	1	1	11	...	...	...	...	28	12	12	...
Pi Kappa Phi.....	7	3	20	9	...	...	...	...	12	...	11	...	2	11	3	10	...
Sigma Alpha Epsilon.....	47	...	23	35	33	21	2	17	22	5	39	26	...	46	46	20	...
Sigma Chi.....	29	13	14	26	27	6	1	2	17	...	29	22	1	29	31	8	7
Sigma Nu.....	4	3	16	2	4	...	...	...	12	...	21	...	...	7	7	...	...
Sigma Pi Epsilon.....	42	...	15	28	28	...	2	21	19	5	38	22	...	42	42	4	8
Zeta Beta Tau.....	23	1	...	10	11	...	...	2	...	...	20	...	...	19	21	...	...
Southgate.....	2	6	19	...	...	...	...	...	11	...	...	14	...	3	2	...	...
Epworth.....	...	...	...	1	...	...	...	...	7	...	...	...	...	...	...	...	...
Independent.....	2	...	...	7	3	...	6	6	8	...	...	...	...	1	1	2	...
School of Religion.....	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Medical School.....	...	...	...	...	...	...	1	...	14	...	...	...	...	...	...	...	...
House J.....	...	...	20	5	...	...	1	...	18	...	...	...	...	...	...	...	...
House K.....	8	3	12	4	...	...	1	2	12	...	...	...	...	6	2	...	...
House L.....	8	3	16	11	5	...	1	...	15	...	20	...	...	4	3	...	...
House M.....	13	19	15	13	1	...	...	1	11	...	...	...	...	10	...	...	...
House N.....	...	...	11	7	2	...	...	...	17	...	...	...	...	6	...	...	...
House O.....	...	...	17	11	1	...	1	...	10	...	...	...	...	2	...	...	...
House P.....	3	2	10	5	1	1	...	...	11	...	...	...	1	7	1	...	...
Totals.....	304	130	393	358	252	35	21	77	355	13	346	231	24	392	291	72	37
Grand Total.....	3,331																

Although the number of participants has doubled in the past six years, we feel that with the addition of the new facilities which will be available in 1939-40, new activities can be added and the crowded conditions that have been faced in the past will be ended.

For the coming year we are planning a reorganization of the administration in regard to managers, as the set-up now is getting too large for one Senior Manager to handle efficiently.

The Intramural Department is organized the same as the varsity sports in regard to managers, that is, Freshman, Sophomore, Junior and Senior Managers. The Senior Manager receives a letter and sweater, and he is selected on the basis of work and scholarship.

A budget of six hundred dollars is allowed this Department for the

buying of trophies and medals. In all the team sports, the teams are organized into leagues of eight teams each, whenever possible, and the league winners are given trophies. In the individual sports the winners and runner-up are given the award in both singles and doubles.

Each organization is charged an entry fee for each sport (maximum \$2.50) which is used to buy equipment, office supplies, and to pay officials.

Intercollegiate sports are engaged in almost exclusively by students of Trinity College. Contests for the Freshmen are strictly limited in number. No student may engage in varsity sports until he has been in residence a full academic year and passed a minimum of twenty-four semester hours of work; and he must, to maintain his eligibility, pass each year twenty-four semester hours of work. This is a requirement of the Southern Conference, of which the University has long been a member. Intercollegiate sports have long been recognized as an important part of undergraduate life. Where they are well managed and proper standards are constantly maintained, they become an effective part of the training of youth. Much of the exaggerated prominence given them in an undesirable way emanates not from the campuses but from the general public. Students, both those who take part in the contests and those who observe them and "pull" for their teams, show far more balance and sanity in evaluating the meets than do their elders. We believe that the general spirit and the standards in such sports here are praiseworthy. The coaches of all our teams constantly strive to safeguard the welfare of our students and the whole cause of intercollegiate athletics. It is the mature judgment of those directly in touch with this part of undergraduate life that intercollegiate athletics here are on a sound basis. Altogether aside from the glamor and the excitement of the contests in which well taught and properly equipped youth participate, these contests are typically American and contribute greatly to the training of men, who can carry both the spirit and the substance of such experience over into life in whatever sphere their fates later take them.

All members of our Physical Education Staff receive their appointments in the same way as do other members of the teaching staff. Their "tenure of office" is on the same basis as is that of every other servant of the University: conduct, character, and ability. They are loyal first to the ideals and standards of the University and, secondly, to the highest ideals in sportsmanship.

The program is large and is growing. Just here the financial problem becomes serious. But for the fact that during the last several years football has earned considerable money, it would be impossible to finance the large program; for in the other sports expense is greater than gate receipts. Students are continually asking for additional sports. All of us charged with the responsibility of student welfare must keep in mind the need to guard against travel dangers in unsafe vehicles, insufficient equipment in sports demanding many safeguards, and lack of proper training under good instructors.

In order to give an idea of this part of the whole physical program

at the University, I am adding a tabulation of the participants in the various intercollegiate sports for the year 1938-39.

TABLE 4

<i>Sport</i>	<i>Squad Membership</i>	<i>No. Participated in Intercollegiate Meets</i>
Football (Varsity)	77	36
Football (Freshman)	75	42
Cross Country (Varsity).....	25	10
Cross Country (Freshman).....	8	8
Basketball (Varsity)	20	16
Basketball (Freshman)	30	17
Boxing (Varsity)	12	8
Boxing (Freshman)	12	7
Wrestling (Varsity)	14	10
Wrestling (Freshman)	11	8
Swimming (Varsity)	24	24
Swimming (Freshman)	26	26
Baseball (Varsity)	45	24
Baseball (Freshman)	36	24
Track (Varsity)	25	23
Track (Freshman)	30	17
Tennis (Varsity)	28	10
Tennis (Freshman)	37	10
Golf (Varsity)	13	10
Golf (Freshman)	8	6
Soccer (Varsity)	20	17
Lacrosse (Varsity)	35	19
Fencing (Varsity)	8	8
Fencing (Freshman)	4	4
	<hr/> 619	<hr/> 384

WALLACE WADE,
Director.

THE UNIVERSITY PRESS

To the President of the University:

The year 1938-39 was one of unusual activity for the Duke University Press. In addition to the publication of the ten quarterly periodicals issued by the Press and to book releases at even more than a normal rate, additional emphasis was given to the book publishing interests of the Press by the appearance of special volumes particularly pertinent to the Centennial Year. A detailed report of the year's operations has been submitted by Dr. R. O. Rivera, Executive Secretary of the Press, from which the following information is given.

Books and monographs issued during the year were as follows:

- Blackburn, William. *The Architecture of Duke University*
Brownell, William A. et al. *Learning as Reorganization*
Crowell, John F. *Personal Recollections of Trinity College, North Carolina, 1887-1894*
Dowd, Jerome. *The Life of Braxton Craven*
Draper, John W. *The "Hamlet" of Shakespeare's Audience*
Herron, Ima H. *The Small Town in American Literature*
Laprade, W. T. et al. *In Memoriam William Kenneth Boyd*
Lewin, Kurt. *The Conceptual Representation and the Measurement of Psychological Forces*
MacColl, Sylvia. *A Comparative Study of the Systems of Lewin and Koffka with Special Reference to Memory Phenomena*
Rankin, Robert S. *When Civil Law Fails*
Rankin, Robert S. (ed.) *Century of Social Thought—Centennial Lectures*
Spengler, J. J. *France Faces Depopulation*
Welfling, Weldon. *Savings Banking in New York State*

Approved and in process of publication during the period covered were the following books:

- Agnew, D. C. *The Effect of Varied Amounts of Phonetic Training on Primary Reading*
Brown, Herbert R. *The Sentimental Novel in America*
Chugerman, Samuel. *Lester F. Ward, The American Aristotle*
Eaton, Clement. *Freedoms of Thought in the Old South*
Eskridge, T. J., Jr. *Growth in Understanding of Geographic Terms in Grades IV to VII*
Jensen, Gerard E. *The Life and Letters of Henry Cuyler Bunner*
Long, A. W. *Sanctuary in Carolina*
McDermott, Malcolm, and Lemkin, Raphael. *The Polish Penal Code of 1932*
Thompson, Edgar T. (ed.) et al. *Race Relations and the Race Problem*
Wallin, J. E. W. *Minor Mental Maladjustments in Normal People*

Of special interest is the fact that during the year we were fortunate enough to have been honored by the confidence of individuals and organizations whose financial aid helped materially to bear the cost of printing and publishing several books and journals. The Research Council of Duke University co-operated in an effective way by making grants-in-aid for the publication of several studies by members of the Faculty which otherwise might not have been published because of the limited amount of our appropriation.

As forecast in last year's report, on April 5, 1939, in combination with the Friends of the Library, a dinner was held at which the name of

the winner of the Centennial Contest Prize was made public. Dr. Clement Eaton, Head of the Department of History at Lafayette College, Easton, Pennsylvania, received the first prize on his manuscript, "Freedom of Thought in the Old South." Dr. Eaton is a native of Winston-Salem and a graduate of the University of North Carolina. Final judges had recommended that an additional prize be given to the author of the manuscript, "The Sentimental Novel in America, 1789-1860," by Professor Herbert R. Brown, of Bowdoin College, Maine. The announcement about this prize was also made at the dinner, and Professor Brown, previously invited for the purpose, was present to receive it. Both manuscripts are being published by the Press.

All our periodicals continued their uninterrupted progress and service to learning with their ever-increasing scholarly contributions to the various fields covered. Because of growing circulation, it has been necessary to increase the number of copies printed in each issue of both *American Literature* and *The Hispanic American Historical Review*.

Some changes have occurred in the Editorial Staffs during the year. It is with a sense of deep regret that we record here the passing of two of our editors. Professor William McDougall, whose death occurred in November, 1938, was, with Professor J. B. Rhine, the founder and co-editor of *The Journal of Parapsychology*, the appearance of which caused widespread comment from press and public alike. Because of his death and the pressure of work on Dr. Rhine, it was decided to entrust the editorship of the *Journal* to Professors Gardner Murphy, of Columbia University, and Bernard F. Riess, of Hunter College.

In March, 1939, occurred the death of Dr. James A. Robertson, Archivist of the State of Maryland, one of the founders and, from the beginning, Managing Editor of *The Hispanic American Historical Review*. To succeed Dr. Robertson, Professor John Tate Lanning, who had been Associate Managing Editor since 1936, was appointed. Professor Alan K. Manchester was appointed to be Associate Managing Editor.

Our publicity continues to improve, and our books are attracting wider attention. In fact, the number of reviews received marked an increase of 50 per cent over the previous year, which was a notable one from this standpoint. The pamphlet, *Books of the Centennial Year*, was profusely circulated. It included publicity on twenty-six books and monographs as well as on all our periodical publications. This was the most extensive advertising yet attempted by the Press and was made possible only by a generous contribution from the Centennial Fund.

Our ceaseless efforts aimed at the building up of the subscription lists of the periodical publications have met with marked success except in one case. Notable among the increases has been that of the *Duke Mathematical Journal*, which has received 103 new subscriptions and 34 additional paid exchanges during the year.

Again I would direct attention to the need of enlarged quarters in order that the constantly expanding work of the Press may be handled in the most effective manner.

HENRY R. DWIRE,
Director.

THE UNIVERSITY COUNCIL ON RESEARCH

To the President of the University:

The report of the University Council on Research for the period beginning July 1, 1938, and ending June 30, 1939, is submitted herewith. There is appended to this a list of the scholarly publications appearing under the names of the members of the faculties of the different schools of the University during this period. This list continues similar lists published in your earlier reports.

With one or two exceptions the membership of the Council for the academic year 1938-39 remained the same as during the previous year. The list of members follows: B. H. Branscomb, W. H. Glasson, P. M. Gross, F. M. Hanes, C. B. Hoover, H. C. Horack, J. T. Lanning, Wm. McDougall, A. S. Pearse, D. T. Smith, J. M. Thomas, and N. I. White.

The following officers were elected at a meeting in November, 1938: P. M. Gross, Chairman; C. B. Hoover, Secretary; and A. S. Pearse, D. T. Smith, and N. I. White as members of the Executive Committee. The co-operation of the administrative officers of the University made possible the assignment in the spring of 1938 of a budget of \$26,000 to the Research Council for the year 1938-39. Ninety-seven grants were made to members of the Faculty from this budget at a meeting of the Council held in May, 1938.

Last year in this report attention was drawn to the rapid growth of research activity in the University since the organization of the Research Council in June, 1934. While this growth has been exceedingly gratifying, it has certain implications that cannot be ignored. It was pointed out that much of the research in progress was being carried out by the younger members of our Faculty. Also, many projects started soon after the completion of our University building program have expanded greatly both in scope and significance. As the projects of the younger men mature and those projects of longer standing develop further, it is evident that they will require increasing support if their full potentialities are to be realized. It seems clear therefore that the financial support for research will have to increase year by year if an adequate development is to be assured.

Since the second year of its operation, 1935, the funds of the Research Council have increased by about 30 per cent. In this period it would be conservative to say that research activity in the University had increased by 80 or 90 per cent. While it should not be claimed that there is a direct relation between the financial support of research and productivity, there is a close correlation between the two under modern conditions of university research and scholarship. The lack of funds which we feel with this expanding program of research is the more acute because the scale on which we have supported research has never been adequate if we may judge by the provision that is made for it in some of our stronger universities. If this comparison provides a sound criterion a sum two

to three times that which we have available at present could be wisely and properly spent in view of the number, nature, and scope of the research undertakings which we have underway at present. A strong indication that this comparison does provide a valid criterion is to be found in the fact that many more sound and useful research projects have always been submitted than the Council had funds to provide for.

During our transition from a small college many things have increased—buildings, student body, Faculty, and extracurricular activities. It seems only right to urge that support for research and scholarship should at least keep pace with this growth. If this is not done we may find in a few years that our slowly increasing resources have been absorbed in and diverted to the expansion of less essential or even nonessential activities. In the last analysis it is not buildings, large numbers, or diversity of activities that make a real university. The essential ingredients are good students, good teachers, and good research and scholarly work. Many of us feel that the provision we are making for the last two items is far from adequate.

As has been customary in previous reports from the Council, we draw attention to certain significant contributions among publications of the Faculty of the School of Arts and Sciences that have been issued during the year just passed. Among the items from the social sciences we may mention an important comprehensive study bearing on the relation between public opinion and foreign policy in the case of Germany and the Great Powers by Professor E. M. Carroll, of the Department of History; the appearance of several articles by Assistant Professor R. Taylor Cole, of the Department of Political Science, on the Fascist States of Europe; a publication under the editorship of Assistant Professor E. T. Thompson, by our own press, of a symposium volume on Race Relations and the Race Problem, and a study of Government in Republican China by Assistant Professor Paul M. A. Linebarger.

In the humanities we may note several articles on Oriental philosophy by Professor Homer H. Dubs, of the Department of Philosophy; a book by Assistant Professor C. R. Anderson entitled *Melville in the South Seas*, which has received uniformly high praise from critics, and the appearance of several articles relating to the literature of the Renaissance by Assistant Professor D. C. Allen, of the Department of English.

In the field of the sciences there may be mentioned several reports by Professor W. M. Nielsen, of the Department of Physics, and his students which have proved of significance in clarifying some aspects of the theory of cosmic ray showers; several papers by Dr. L. E. Anderson, of the Department of Botany, on the systematics of mosses; spectroscopic studies bearing on molecular structure by Professor H. Spomer, of the Department of Physics; and a number of articles by Assistant Professor C. R. Hauser elucidating the mechanism of certain condensation reactions in organic chemistry.

PAUL GROSS,
Chairman.

PUBLICATIONS OF THE MEMBERS OF THE FACULTIES OF THE
GRADUATE SCHOOL OF ARTS AND SCIENCES AND OF THE
UNDERGRADUATE COLLEGES OF DUKE UNIVERSITY
IN THE PERIOD OF JULY 1, 1938, TO JUNE 30, 1939

ADAMS, D. K. Psychology.

"William McDougall," *Psychological Review*, XLVI, 1-8 (Jan., 1939).

ALLEN, D. C. English.

Francis Meres, Palladis Tamia (New York: Scholars' Facsimiles Reprints, 1938), xv + 674 pp.

"Science and Invention in Greene's Prose," *Publications of the Modern Language Association*, LIII, 1007-1019 (Dec., 1938).

"Melbancke and Gosson," *Modern Language Notes*, LIX, 111-114 (Feb., 1939).

—(with ten other collaborators), "Recent Literature of the Renaissance," *Studies in Philology*, XXXVI, 253-433 (May, 1939).

ANDERSON, CHARLES R. English.

"The Romance of Scholarship: Tracking Melville in the South Seas," *Colophon*, New Series, III, 259-279 (1938).

"Melville's English Debut," *American Literature*, XI, 23-38 (March, 1939).

Melville in the South Seas (New York: Columbia University Press, 1939). 522 pp.

ANDERSON, LEWIS E. Botany.

"The Mosses of North Carolina. III. Andreaeaceae to Fissidentaceae," *Bryologist*, XLI, 82-90 (Aug., 1938).

"The Mosses of North Carolina. IV. Archidiaceae to Seligeriaceae," *Bryologist*, XLI, 118-123 (Oct., 1938).

"Some Remarks on Papillose Forms in the Genus *Atrichum* with a Redescription of *A. MacMillani*," *Bryologist*, XLI, 141-143 (Dec., 1938).

"The Mosses of North Carolina. V. Dicranaceae to Calymperaceae," *Bryologist*, XLII, 62-70 (June, 1939).

—(with Henry J. Oosting), "Plant Succession on Granite Rock in Eastern North Carolina," *Botanical Gazette*, C, 750-768 (June, 1939).

BERRY, WILLARD Geology.

"Branching of Callixylon," *American Journal of Science*, CCXXXVII, 124-129 (Feb., 1939).

BLOMQUIST, H. L. Botany.

"Notes on Southern Hepaticae," *Bryologist*, XLII, 29-32 (April, 1939).

"Grasses New to North Carolina," *Castanea*, IV, 50-55 (1939).

*BOAS, RALPH P., JR. Mathematics.

"A Theorem on Analytic Functions of a Real Variable," *Bulletin of the American Mathematical Society*, XLI, 233-236 (April, 1935).

"Necessary and Sufficient Conditions in the Moment Problem for a Finite Interval," *Duke Mathematical Journal*, I, 449-476 (Dec., 1935).

"Some Theorems on Fourier Transforms and Conjugate Trigonometric Integrals," *Transactions of the American Mathematical Society*, XL, 287-308 (Sept., 1936).

"The Derivative of a Trigonometric Integral," *Journal of the London Mathematical Society*, XII, 164-165 (July, 1937).

"Asymptotic Relations for Derivatives," *Duke Mathematical Journal*, III, 637-646 (Dec., 1937).

* Signifies members of the Faculty who began their tenure in 1939. A list of their publications since 1925 is included as indicative of their fields of interest.

- "Some Gap Theorems for Power Series," *Duke Mathematical Journal*, IV, 176-188 (March, 1938).
- "Tauberian Theorems for (C, 1) Summability," *Duke Mathematical Journal*, IV, 227-230 (March, 1938).
- "Representations for Entire Functions of Exponential Type," *Annals of Mathematics*, XXXIX, 269-286 (April, 1938).
- (with S. Bochner), "Closure Theorems for Translations," *Annals of Mathematics*, XXXIX, 287-300 (April, 1938).
- (with F. Smithies), "On the Characterization of a Distribution Function by Its Fourier Transform," *American Journal of Mathematics*, LX, 523-531 (July, 1938).
- (with J. W. Tukey), "A Note on Linear Functionals," *Bulletin of the American Mathematical Society*, XLIV, 523-528 (Aug., 1938).
- "A Tauberian Theorem Connected with the Problem of Three Bodies," *American Journal of Mathematics*, LXI, 161-164 (Jan., 1939).
- (with D. V. Widder), "The Iterated Stieltjes Transform," *Transactions of the American Mathematical Society*, XLV, 1-72 (Jan., 1939).
- (with S. Bochner), "On a Theorem of M. Riesz for Fourier Series," *Journal of the London Mathematical Society*, XIV, 62-73 (Jan., 1939).
- "Remarks on a Theorem of B. Lewitan," *Matematicheskii Sbornik (Recueil Mathématique)* [Moscow], V, 185-187 (Jan., 1939).
- "The Stieltjes Moment Problem for Functions of Bounded Variation," *Bulletin of the American Mathematical Society*, XLV, 399-404 (June, 1939).
- "Oscillating Functions," *Duke Mathematical Journal*, V, 394-400 (June, 1939).
- BONNER, L. G. Physics.
- (with Robert Hofstadter), "Vibration Spectra and Molecular Structure. IV. The Infra-Red Absorption Spectra of the Double and Single Molecules of Formic Acid," *The Journal of Chemical Physics*, VI, 531-534 (Sept., 1938).
- *BRADSHAW, CHARLES K. Chemistry.
- (with L. F. Fieser), "The Orientation of p-Methoxydiphenyl in the Friedel and Crafts Reaction," *Journal of the American Chemical Society*, LVIII, 1738-1741 (1936).
- (with L. F. Fieser), "The Fries Rearrangement of 4-Benzoyloxydiphenyl," *Journal of the American Chemical Society*, LVIII, 2337-2338 (1936).
- (with Allan K. Schneider), "Synthesis of Phenanthrene Derivatives. I. 9-Phenyl and 9-p-Tolylphenanthrene," *Journal of the American Chemical Society*, LX, 2960-2962 (1938).
- (with Louis F. Fieser), "4-Alkyl Derivatives of 1, 2-Naphthoquinone," *Journal of the American Chemical Society*, LXI, 417-423 (Feb., 1939).
- (with Ronald Rosher), "Synthesis of Phenanthrene Derivatives. II. 9, 10-Disubstituted Hydrocarbons," *Journal of the American Chemical Society*, LXI, 1524-1525 (June, 1939).
- BROWNELL, W. A. Education.
- (with Kenneth G. Kuehner and William C. Rein), "Learning as Re-Organization: An Experimental Study in Third-Grade Arithmetic," *Duke University Research Studies in Education* (Durham: Duke University Press, 1939). No. 3. 87 + xx pp.
- (with Guy T. Buswell, Lenore John, and Edwina Deans), *Directed Experience with Numbers: A Workbook for Grade III* (Boston: Ginn and Company, 1939). 112 pp.
- (with Guy T. Buswell, Lenore John, and Edwina Deans), *Directed Experience with Numbers: A Workbook for Grade IV* (Boston: Ginn and Company, 1939). 96 pp.

CARROLL, E. M. History.

Germany and the Great Powers. A Study in Public Opinion and Foreign Policy (New York: Prentice-Hall, Inc., 1938). 852 pp.

CLYDE, PAUL H. History.

"Changkufeng," *Contemporary Japan: A Review of Japanese Affairs*, VII, 428-436 (Dec., 1938).

"Germany's Former Colonies: The Mariana, Caroline and Marshall Islands," *The Geographical Magazine*, VIII, 215-224 (Jan., 1939).

COLE, R. TAYLOR Political Science.

"Current Appraisals of German National Socialism," *The Journal of Politics*, I, 195-205 (May, 1939).

"Italy's Fascist Bureaucracy," *The American Political Science Review*, XXXII, 1143-1157 (Dec., 1938).

"The Italian Ministry of Popular Culture," *The Public Opinion Quarterly*, II, 425-435 (July, 1938).

CUNNINGHAM, BERT Zoology.

—(with Charles W. Hooker), "Regeneration of Testis in the Fowl, and Its Bearing on Germ-cell Theory," *The Anatomical Record*, LXXII, 371-385 (Nov., 1938).

—(with Jerome S. Bruner), "The Effect of Thymus Extract on the Sexual Behavior of the Female Rat," *The Journal of Comparative Psychology*, XXVII, 69-77 (Feb., 1939).

"Further Studies on Incubation of Turtle (*Malaclemys Centrata* Lat.) Eggs," *The American Naturalist*, LXXIII, 285-288 (May-June, 1939).

—(with Ralph Baum), "A Study of the Relationships Between Primary and Secondary Sex Organs of the Rat," *Endocrinologie*, XXI, 345-354 (June, 1939).

DARKIS, F. R. Chemistry.

—(with J. A. Pinckard, F. A. Wolf, Ruth McLean, and P. M. Gross), "Laboratory Studies on Toxicity of Benzol Vapors to Tobacco Seedlings and to *Peronospora Tabacina*," *Phytopathology*, XXIX, 177-187 (Feb., 1939).

—(with F. A. Wolf, J. A. Pinckard, Ruth McLean, and P. M. Gross), "Field Studies on Concentration of Benzol Vapors as Used to Control Downy Mildew of Tobacco," *Phytopathology*, XXIX, 103-120 (Feb., 1939).

DAVIS, GIFFORD Romance Languages.

—(with Neal Dow), *Essentials of French for Accurate Reading* (Durham: Seeman Printery, 1938). 89 pp.

DE VYVER, FRANK T. Economics.

"The Present Status of Labor Unions in the South," *Southern Economic Journal*, IV, 485-498 (April, 1939).

"Regulation of Wages and Hours Prior to 1938," *Law and Contemporary Problems*, VI, 323-332 (Summer, 1939).

DOW, NEAL Romance Languages.

—(with Gifford Davis), *Essentials of French for Accurate Reading* (Durham: Seeman Printery, 1938). 89 pp.

DUBS, HOMER H. Philosophy.

"The Victory of Han Confucianism," *Journal of the American Oriental Society*, LVIII, 435-459 (Sept., 1938).

"Solar Eclipses during the Former Han Period," *Osiris*, V, 499-522 (1938).

"The Present Significance of Oriental Philosophies," *The Philosophical Review*, 311-315 (May, 1939).

EASLEY, HOWARD Education.

**"The Curve of Forgetting and the Distribution of Practice," *Journal of Educational Psychology*, XXVIII, 474-478 (Sept., 1937).

** Omitted from previous lists.

- ***"A Note on 'The Effectiveness of Checking Subtraction by Addition,'" *Elementary School Journal*, XXXVIII, 730-732 (June, 1938).
- "Remedial Instruction at the College Level," *Southern Association Quarterly*, II, 408-414 (1938).
- EITEMAN, WILFORD J. Economics.
 "The Economics of Rising Security Prices," *American Economic Review*, XXVIII, 702-706 (Dec., 1938).
- ELLWOOD, CHARLES A. Sociology.
 "What Shall we do with Our Schools?" *Journal of the National Education Association*, XXVIII, 13-16 (Jan., 1939).
 "The United States of Brazil: A Coming World Power," *World Affairs Interpreter*, X, 161-164 (Summer, 1939).
 "Introduction," *Democracy: Its Problems and Its Strength*, by Willett L. Hardin (Pasadena: San Pasquel Press, 1938). xvi + 200 pp.
 —(translated into Dutch by J. J. Von Schmid, University of Leiden), *De Psychologie Van de Menschelijke Samenleving* (Amsterdam: Scheltema and Holkema's Boekhandel, 1939). xxiii + 409 pp.
- GARREN, KENNETH H. Botany.
 —(with F. A. Wolf and J. K. Miller), "Fungi of the Duke Forest and Their Relation to Forest Pathology," *Duke University School of Forestry Bulletin*, II (Aug., 1938). 122 pp.
 "Studies on Polyporus Abietinus. I. The Enzyme-Producing Ability of the Fungus," *Phytopathology*, XXVIII, 839-845 (Nov., 1938).
 "Studies on Polyporus Abietinus. II. The Utilization of Cellulose and Lignin by the Fungus," *Phytopathology*, XXVIII, 875-878 (Dec., 1938).
 "Studies on Polyporus Abietinus. III. The Influence of Certain Factors on the Rate of Decay of Loblolly Pine Sapwood," *Journal of Forestry*, XXXVII, 319-323 (April, 1939).
- GILBERT, ALLAN H. English.
 "Did Plato Banish the Poets or the Critics?" *Studies in Philology*, XXXVI, 1-19 (Jan., 1939).
 "Chapman's Fortune with Winged Hands: Supplementary," *Modern Language Notes*, LIX, 201 (March, 1939).
 "Mock Accents in Renaissance and Modern Latin," *Publications of the Modern Language Association*, LIV, 608-610 (June, 1939).
- GOHDES, CLARENCE English.
 "Three Letters by James Kay Dealing with Brook Farm," *Philological Quarterly*, XVII, 377-388 (Oct., 1938).
 "Some Letters by O. Henry," *The South Atlantic Quarterly*, XXXVIII, 31-39 (Jan., 1939).
- GRAY, I. E. Zoology.
Laboratory Directions for Comparative Vertebrate Anatomy (Philadelphia: P. Blakiston's Sons and Company, 1938). 80 pp.
- GREENWOOD, JOSEPH A. Mathematics.
 "An Empirical Investigation of Some Sampling Problems," *Journal of Parapsychology*, II, 222-230 (Sept., 1938).
 "Frechet on the Calculus of Probability," *Bulletin of the American Mathematical Society*, LXV, 56-58 (Jan., 1939).
- GROSS, PAUL M. Chemistry.
 —(with J. A. Pinckard, F. A. Wolf, Ruth McLean, and F. R. Darkis), "Laboratory Studies on Toxicity of Benzol Vapors to Tobacco Seedlings and to Peronospora Tabacina," *Phytopathology*, XXIX, 177-187 (Feb., 1939).

- (with F. A. Wolf, J. A. Pinckard, F. R. Darkis, and Ruth McLean), "Field Studies on Concentration of Benzol Vapors as Used to Control Downy Mildew of Tobacco," *Phytopathology*, XXIX, 103-120 (Feb., 1939).
- (with H. Gilmann), "Vapor Pressure Studies. I. Evidence for the Validity of Raoult's Law. The Systems Benzene-Diphenyl, Benzene-Benzyl Benzoate, Ethyl Acetate-Benzyl Benzoate," *Journal of the American Chemical Society*, LX, 1525-1530 (July, 1938).
- (with J. C. Rintelen and John H. Saylor), "Energy and Volume Relations in the Solubilities of Some Ketones in Water," *Journal of Physical Chemistry*, XLIII, 197-205 (Feb., 1939).
- HALL, F. G. Zoology.
"Changes in Composition of Sweat During Acclimatization to Heat," *American Journal of Physiology*, CXXIII, 412-419 (Aug., 1938).
- HAMILTON, EARL J. Economics.
"Relation of Wage Policies and Price Policies," *American Economic Review*, XXIX, 243-248 (1939).
- HAMILTON, WILLIAM B. History.
"Bibliography of Published Writings" (in *In Memoriam William Kenneth Boyd*), *Historical Papers of the Trinity College Historical Society*, XXII, 80-97 (1938).
"The Sources of History of the Mississippi Territory," *The Journal of Mississippi History*, I, 29-36 (Jan., 1939).
- HART, HORNELL Sociology.
"Value-Judgments in Sociology," *American Sociological Review*, III, 862-867 (Dec., 1938).
- HASBROUCK, FRANCIS M. Romance Languages.
"Is Spain Done For?" *The South Atlantic Quarterly*, XXXVII, 252-262 (July, 1938).
- HAUSER, CHARLES R. Chemistry.
—(with R. L. Peck), "Chemical Studies of Certain Pathogenic Fungi. I. The Lipids of Blastomyces Dermatiditis," *Journal of the American Chemical Society*, LX, 2599-2603 (Nov., 1938).
—(with R. L. Peck), "Chemical Studies of Certain Pathogenic Fungi. II. The Lipids of Monilia Albicans," *Journal of the American Chemical Society*, LXI, 281-284 (Feb., 1939).
—(with R. D. Bright), "The Influence of Substituents on the Rates of Decomposition of the Potassium Salts of Dihydroxamic Acids, The Lossen Rearrangement," *Journal of the American Chemical Society*, LXI, 618-629 (March, 1939).
—(with J. W. LeMaistre and A. E. Rainsford), "The Reaction of Ald-Chlorimines with Grignard Reagents," *Journal of Organic Chemistry*, IV, 106-110 (May, 1939).
"Condensations Brought About by Bases. III. The General Course of the Claisen Type of Condensation," *Journal of the American Chemical Society*, LX, 1957-1959 (Aug., 1938).
—(with B. E. Hudson and R. H. Dick), "Condensations Brought About by Bases. IV. The Condensation of Ethyl Isobutyrate with Benzoyl Chloride, Benzoic Anhydride and Phenyl Benzoate as Example of the Claisen Type of Condensation," *Journal of the American Chemical Society*, LX, 1960-1962 (Aug., 1938).
—(with D. S. Breslow), "Condensations Brought About by Bases. V. The Condensation of the Anhydride with the Aldehyde in the Perkin Synthesis," *Journal of the American Chemical Society*, LXI, 786-792 (April, 1939).

- (with D. S. Breslow), "Condensations Brought About by Bases. VI. The Mechanism of the Perkin Synthesis," *Journal of the American Chemical Society*, LXI, 793-798 (April, 1939).
- (with W. B. Renfrow, Jr.), "Ethyl Benzoyldimethylacetate," Chapter XVI, pp. 43-44; "Benzohydroxamic Acid," Chapter VI, pp. 15-17; "Triphenylmethylsodium," Chapter XXX, pp. 83-85, in *Organic Syntheses*, Vol. XIX (New York: John Wiley and Sons, 1939). 105 pp.
- HEBB, M. H. Physics.
"Note on the Theory of β -Decay," *Physica*, VIII, 701-704 (Aug., 1938).
- (with G. E. Uhlenbeck), "Stability of Nuclear Isomers," *Physico* VII, 605-608 (July, 1938).
- HOBBS, MARCUS E. Chemistry.
"The Solid State of H₂, HD and D₂," *Journal of Chemical Physics*, VII, 318-322 (May, 1939).
- HOLTON, HOLLAND Education.
—(with Guy B. Phillips, Julian S. Miller, George Ross, H. E. Stacy, Ben Cone, Mrs. H. G. Etheridge, J. H. Griggs, and J. H. Rose), "Report and Recommendations of the Governor's Commission on Education," *Public Documents of the State of North Carolina* (Dec., 1938). 63 pp.
"Two Continuing Problems of the Colleges" (Annual address of the president), *Proceedings of the Eighteenth Annual Meeting of the North Carolina College Conference* (James E. Hillman, Secretary, Raleigh, N. C.), pp. 8-15 (1938).
"Editorial Notes," *The Southern Association Quarterly*, II, 393-395 (Nov., 1938); III, 3-5 (Feb., 1939).
"Report on the Southern Association Quarterly," *The Southern Association Quarterly*, III, 257-259 (May, 1939).
- HOOVER, CALVIN B. Economics.
—(with others), "The Economics of Fascism," section in *Dictatorship in the Modern World* (Minneapolis: The University of Minnesota Press, 1939). Pp. 215-230.
- HUBBELL, JAY B. English.
"Some Uncollected Poems by Joseph Addison," *Modern Philology*, XXXVI, 277-281 (Feb., 1939).
"Five Letters from George Henry Boker to William Gilmore Simms," *Pennsylvania Magazine of History and Biography*, LXIII, 66-71 (Jan., 1939).
- HURST, WILLIAM Physics.
"A Sensitive Differential Manometer," *The Review of Scientific Instruments*, X, 27-29 (Jan., 1939).
- JEFFERS, KATHARINE R. Zoology.
—(with Mary Jane Guthrie), "Growth of Follicles in the Ovaries of the Bat *Myotis Lucifugus Lucifugus*," *Anatomical Record*, LXXI, 477-496 (Aug., 1938).
—(with Mary Jane Guthrie), "The Ovaries of the Bat *Myotis Lucifugus Lucifugus*, after Injection of Hypophyseal Extract," *Anatomical Record*, LXXII, 11-36 (Sept., 1938).
- JENSEN, HOWARD E. Sociology.
"Mental Hygiene and Family Counseling," *Social Forces*, XVII, 90-98 (Oct., 1938).
"Local Association Financing and the Community Fund," *The White Cone*, II, 4 (April, 1939).
"William McDougall's Doctrine of Social Psychology," *The Journal of Social Philosophy*, IV, 207-219 (April, 1939).
- JOHNSON, MYCHYLE W. Zoology.

- **—(with O. Riddle, R. W. Bates, J. P. Schooley, G. C. Smith, and E. L. Lahr), "Endocrine Studies," *Carnegie Institution of Washington Year Book*, No. XXXV, pp. 49-56 (Dec., 1936).
- **—(with O. Riddle, R. W. Bates, J. P. Schooley, G. C. Smith, and E. L. Lahr), "Endocrine Studies," *Carnegie Institution of Washington Year Book*, No. XXXVI, pp. 55-62 (Dec., 1937).
- "Observations on Abortive Oocytes in the Camel Cricket" (Abstract), *Anatomical Record*, LXXII (supplement), 74 (Dec., 1938).
- KRAMER, PAUL J. Botany.
 "The Effects of Drops of Water on Leaf Temperature," *American Journal of Botany*, XXVI, 12-14 (1939).
- LANDON, CHARLES E. Economics.
Industrial Geography (New York: Prentice-Hall, Inc., 1939). 811 pp.
- LAPRADE, WILLIAM T. History.
 "Colleague and Friend" (in *In Memoriam William Kenneth Boyd*), *Historical Papers of the Trinity College Historical Society*, XXII, 5-8 (1938).
- "Historians of Seminal Centuries," *The South Atlantic Quarterly*, XXXVII, 423-433 (Oct., 1938).
- "Academic Freedom and Tenure: Report of Committee A," *Bulletin of the American Association of University Professors*, XXV, 32-43 (Feb., 1939).
- LEMERT, BEN F. Economics.
The Tobacco Manufacturing Industry in North Carolina (Raleigh: National Youth Administration of North Carolina, 1939). 107 pp. Illustrated.
- LEWIS, LEROY. English.
 "Speech Education in the Modern Curriculum," *The Virginia Teacher*, XIX, 145-151 (Oct., 1938).
- "You Can Have a Debate Audience," *The Speaker*, XXIII, 4-9 (Nov., 1938).
- LINEBARGER, PAUL M. A. Political Science.
Government in Republican China (New York: McGraw-Hill Book Company, 1938). 200 pp.
- *LONDON, FRITZ Chemistry.
 —(with H. Hönl), "Ueber die Intensitäten der Bandenlinien," *Zeitschrift für Physik*, XXXIII, 803-809 (1925).
- "Energiesatz und Rydbergprinzip in der Quantenmechanik," *Zeitschrift für Physik*, XXXVI, 775-781 (1926).
- "Die Jacobi'schen Transformationen der Quantenmechanik," *Zeitschrift für Physik*, XXXVII, 915-925 (1926).
- "Die Zahl der Dispersionselektronen in der Undulationsmechanik," *Zeitschrift für Physik*, XXIX, 322-326 (1926).
- "Winkelvariable und Kanonische Transformationen in der Undulationsmechanik," *Zeitschrift für Physik*, XL, 193-210 (1926).
- "Ueber eine Deutungsmöglichkeit der 5-dimensionalen Welt," *Die Naturwissenschaften*, XV, 15-16 (1927).
- "Die Theorie von Weyl und die Quantenmechanik," *Die Naturwissenschaften*, XV, 187 (1927).
- "Quantenmechanische Deutung der Theorie von Weyl," *Zeitschrift für Physik*, XLII, 375-389 (1927).
- (with W. Heitler), "Wechselwirkung Neutraler Atome und Homöopolare Bindung nach der Quantenmechanik," *Zeitschrift für Physik*, XLIV, 455-472 (1927).
- "Quantenmechanische Deutung der Homöopolaren Valenzzahlen," *Die Naturwissenschaften*, XVI, 58-59 (1928).

- "Zur Quantentheorie der Homöopolaren Valenzzahlen," *Zeitschrift für Physik*, XLVI, 455-477 (1928).
- "Zur Quantenmechanik der Homöopolaren Valenzchemie," *Zeitschrift für Physik*, L, 24-51 (1928).
- "Quantentheorie und Chemische Bindung," a chapter in Falkenhagen, H. *Quantentheorie und Chemie* (Leipzig: Hirzel, 1928). Pp. 59-84.
- "Ueber den Mechanismus der Homöopolaren Bindung," a chapter in *Probleme der Theoretischen Physik* (Leipzig, Hirzel, 1928). Pp. 104-112.
- (with H. Kallmann), "Ueber Energieübertragung Zwischen Atomaren Systemen," *Zeitschrift für Physikalische Chemie*, II, 207-243 (1928).
- "Die Bedeutung der Quantenmechanik für die Chemie (Planck-Festschrift)," *Die Naturwissenschaften*, XVII, 516-529 (1929).
- "Quantenmechanische Deutung des Vorgangs der Aktivierung (Bunsen-Tagung)," *Zeitschrift für Elektrochemie*, XXXV, 552-555 (1929).
- (with H. Kallmann), "Quantenmechanische Theorie der Anomal Grossen Wirkungsquerschnitte," *Die Naturwissenschaften*, XVII, 226-227 (1929).
- (with H. Kallmann), "Zur Quantenmechanik der Energieübertragung," *Zeitschrift für Physik*, LX, 417-419 (1930).
- (with R. Eisenschitz), "Ueber das Verhältnis der Van der Waalschen Kräfte zu den Homöopolaren Bindungskräften," *Zeitschrift für Physik*, LX, 491-527 (1930).
- "Zur Theorie und Systematik der Molekularkräfte," *Zeitschrift für Physik*, LXIII, 245-279 (1930).
- "Ueber einige Eigenschaften und Anwendungen der Molekularkräfte," *Zeitschrift für Physikalische Chemie B*, II, 222-251 (1930).
- "Zur Theorie nichtadiabatisch verlaufender chemischer Prozesse," *Zeitschrift für Physik*, LXXIV, 143-174 (1932).
- (with M. Polanyi), "Zur atomtheoretischen Deutung der Adsorptionskräfte," *Die Naturwissenschaften*, XVIII, 1099-1100 (1931).
- "Forces entre les Atomes et les Molécules," 1^{re} Section, Rapport No. 24, Congrès International d'Electricité, Paris, 1932). 18 pp.
- (with H. Kuhn), "Limitation of the Potential Theory of the Broadening of Spectral Lines," *Philosophical Magazine*, XVIII (Series 7), 983-987 (1934).
- (with H. London), "The Electromagnetic Equations of the Supraconductor," *Proceedings of the Royal Society*, CXLIX, 71-88 (1935).
- (with H. London), "Supraleitung und Diamagnetismus," *Physica*, II, 341-354 (1935).
- (with H. London and M. V. Laue), "Zur Theorie der Supraleitung," *Zeitschrift für Physik*, XCVI, 359-364 (1935).
- "Macroscopical Interpretation of Supraconductivity," *Proceedings of the Royal Society*, CLII, 24-34 (1935).
- "On Condensed Helium at Absolute Zero," *Proceedings of the Royal Society*, CLIII, 576-583 (1936).
- Une Conception Nouvelle de la Supra-conductibilité* (Actualités Scientifiques et Industrielles, Paris: Hermann and Cie, 1937). No. 458. 80 pp.
- "Zur Theorie Magnetischer Felder im Supraleiter," *Physica*, III, 450-462 (1936).
- "Electrodynamics of Macroscopic Fields in Supraconductors," *Nature*, CXXXVII, 991-992 (1936).
- "The General Theory of Van der Waals Forces," *Transactions of the Faraday Society*, XXXIII, 8-26 (1937).
- "A New Conception of Supraconductivity," *Nature*, CXL, 793-796, 834-836 (1937).

- "On the Nature of the Supraconducting State," *Physical Review* (2d Series), LI, 678-679 (1937).
- "Supraconductivity in Aromatic Compounds," *Journal of Chemical Physics*, V, 837-838 (1937).
- "Théorie Quantique du Diamagnetisme des Combinaisons Aromatiques," *Comptes Rendus*, CCV, 28-30 (1937).
- "Théorie Quantique des Courants Interatomiques dans les Combinaisons Aromatiques," *Journal de Physique et de Radium*, VIII, 397-409, (1937).
- (with E. Bauer), *La Théorie de l'Observation en Mécanique Quantique* (Actualités Scientifiques et Industrielles, Paris: Hermann and Cie, 1939). No. 775. 51 pp.
- "Sur les Oscillateurs Moléculaires dans les Molécules Aromatiques," *Comptes Rendus*, CCVIII, 2059-2061 (1939).
- "The α -Phenomenon of Liquid Helium and the Bose Einstein Degeneracy," *Nature*, CXLI, 643-644 (1938).
- "Bemerkungen zu einer Arbeit von Bopp über Supraleitung," *Zeitschrift für Physik*, CVIII, 542-544 (1938).
- "On the Bose-Einstein Condensation," *Physical Review*, LIV, 947-954 (1938).
- "The State of Liquid Helium Near Absolute Zero," *Journal of Physical Chemistry*, XLIII, 49-69 (1939).
- LUND, JOHN J. Library.
- Translation of *American Librarianship from a European Angle*, by Wilhelm Munthe (Chicago: American Library Association, 1939).
- LUNDHOLM, HELGE. Psychology.
- "Taste for Affect-Gain," *Psychological Review*, XLV, 242-256 (1938).
- "Mark Antony's Speech and the Psychology of Persuasion," *Character and Personality*, VI, 291-305 (1938).
- MCCLOY, SHELBY T. History.
- "French Charities to the Acadians, 1755-1799," *The Louisiana Historical Quarterly*, XXI, 3-15 (July, 1938).
- "Duclos, Historian and Philosopher," *The South Atlantic Quarterly*, XXXVIII, 60-74 (Jan., 1939).
- MCLEAN, RUTH. Chemistry.
- (with J. A. Pinckard, F. A. Wolf, F. R. Darkis, and P. M. Gross), "Laboratory Studies on Toxicity of Benzol Vapors to Tobacco Seedlings and to Peronospora Tabacina," *Phytopathology*, XXIX, 177-187 (Feb., 1939).
- (with F. A. Wolf, J. A. Pinckard, F. R. Darkis, and P. M. Gross), "Field Studies on Concentration of Benzol Vapors as Used to Control Downy Mildew of Tobacco," *Phytopathology*, XXIX, 103-120 (Feb., 1939).
- (with J. A. Pinckard), "Paradichlorobenzol, an Eradicant Fungicide, Effective Against Downy Mildew of Tobacco," *Phytopathology*, XXIX, 216-219 (Feb., 1939).
- MOUZON, J. C. Physics.
- (with R. D. Park and J. A. Richards), "Gamma Rays from Uranium Activated by Neutrons" (letter to editor), *The Physical Review*, LV, 668 (April, 1939).
- NIELSEN, W. M. Physics.
- (with J. E. Morgan and K. Z. Morgan), "The Rossi Transition Curve for Small Angle Showers," *The Physical Review*, LV, 995-997 (June, 1939).
- "Primary and Secondary Cosmic Rays, Showers and Bursts," *The Journal of the Franklin Institute*, CCXXVI, 601-622 (Nov., 1938).

- (with K. Z. Morgan), "The Absorption of the Penetrating Component of the Cosmic Radiation," *The Physical Review*, LIV, 245-248 (Aug., 1938).
- NORDHEIM, L. W. Physics.
 "Lifetime of the Yukawa Particle" (letter to editor), *The Physical Review*, LV, 506 (March, 1939).
 "Theory of Energy Losses of High Energy Particles," *The Journal of the Franklin Institute*, CCXXVI, 575-597 (Nov., 1938).
- (with G. Nordheim), "On the Production of Heavy Electrons," *The Physical Review*, LIV, 254-265 (Aug., 1938).
- OOSTING, HENRY J. Botany.
 —(with L. E. Anderson), "Plant Succession on Granite Rock in Eastern North Carolina," *Botanical Gazette*, C, 750-768 (1939).
 —(with G. F. Beaven), "Pocomoke Swamp: A Study of Cypress Swamp on the Eastern Shores of Maryland," *Bulletin Torrey Botanical Club*, LXVI, 367-389 (1939).
- *PARKER, HAROLD T. History.
The Cult of Antiquity and the French Revolutionaries: A Study in the Development of the Revolutionary Spirit (Chicago: The University of Chicago Press, 1937). ix + 215 pp.
- PEARSE, A. S. Zoology.
 "Polyclads of the East Coast of North America," *Proceedings of the United States National Museum*, LXXXVI, 67-98 (Oct., 1938).
 —(with G. W. Wharton), "The Oyster 'Leech,' *Stylochus Inimicus* Palombi, Associated with Oysters on the Coasts of Florida," *Ecological Monographs*, VIII, 605-655 (Oct., 1938).
 —(with J. W. Littler), "Polyclads of Beaufort, N. C.," *Journal of the Elisha Mitchell Scientific Society*, LIV, 235-244 (Dec., 1938).
 —(with Almeda M. Walker), "Littoral Polyclads from New England, Prince Edward Island, and Newfoundland," *Bulletin of Mount Desert Island Biological Laboratory*, 15-32 (Jan., 1939).
 —(with Almeda M. Walker), "Rhizocephala in Maine," *Bulletin of Mount Desert Island Biological Laboratory*, pp. 22-23 (Jan., 1939).
Animal Ecology (2d ed.; New York: McGraw-Hill, 1939). xii + 642 pp.
 "Parasite," *Volumen Jubilar pro Prof. Sadao Yoshida*, II, 3-7 (March, 1939).
 —(with Henry A. Walker), "Two New Parasitic Isopods from the Eastern Coast of North America," *Proceedings of the United States National Museum*, LXXXVII, 19-23 (June, 1939).
- PEPPLER, C. W. Greek.
 "Notes on the Text of Lysias," *The American Journal of Philology*, LX, 71-84 (1939).
- PRATT, J. G. Psychology.
 "A Further Advance in Methods of Testing Extra-Sensory Perception," *Journal of Parapsychology*, III, 95-100 (June, 1939).
- RANKIN, ROBERT S. Political Science.
Readings in American Government (New York: D. Appleton-Century Company, 1939). 644 pp.
When Civil Law Fails (Durham: Duke University Press, 1939). 224 pp.
- RATCHFORD, B. U. Economics.
 "Constitutional Provisions Governing State Borrowing," *The American Political Science Review*, XXXII, 694-707 (Aug., 1938).
 —(with K. C. Heise), "Confederate Pensions," *The Southern Economic Journal*, V, 207-217 (Oct., 1938).

*REID, JOHN TURNER Romance Languages.

"Romantic Irony and Satire, Especially in Spain," *Hispania* (First Special Number), 81-96 (Jan., 1934).

"Seven Folktales from Mexico," *Journal of American Folk-lore*, XLVIII, 109-124 (April-June, 1935).

"St. John's Day in Spanish Literature," *Hispania*, XVIII, 401-412 (Dec., 1935).

"Spain as Seen by Some Contemporary American Writers," *Hispania*, XX, 139-150 (May, 1937).

Modern Spain and Liberalism: A Study in Literary Contrasts (Stanford University: Stanford University Press, 1937). 236 pp.

—(with Dorcas W. Reid), "An Annotated Bibliography of Books on Spanish South America and the West Indies," *Hispania*, XX, 313-326 (Dec., 1937).

"Una Curiosidad Métrica en la Literatura Colombiana," *Universidad de Antioquia*, VIII, 5-18 (Jan., 1939).

—(with Dorcas W. Reid), "Colombia's New Library Program," *Library Journal*, LXIV, 299-301 (April, 1939).

"Opportunities for Research in Colombian Literature," *Hispania*, XXII, 177-182 (May, 1939).

"Cultural Bogotá," *World Affairs*, CII, 110-112 (June, 1939).

"Libros Norteamericanos: Grapes of Wrath," *Revista de la Indias*, Epoca 2a., II, 464-468 (June, 1939).

RHINE, J. B. Psychology.

"Extra-Sensory Perception Tests with Enclosed Cards," *Journal of Parapsychology*, II, 199-216 (Sept., 1938).

"The Exclusion of Sensory Clues," *Journal of Parapsychology*, II, 254-259 (Dec., 1938).

"Requirement and Suggestions for an Extra-Sensory Perception Test Machine," *Journal of Parapsychology*, III, 3-10 (June, 1939).

"Introduction" (Symposium on Extra-Sensory Perception Methods), *Journal of Parapsychology*, III, 85-86 (June, 1939).

"Extra-Sensory Perception," *Sigma Xi Quarterly*, XXVI, 170-174 (Dec., 1938).

"Parapsychology," in *The New International Year Book for 1938* (New York: Funk and Wagnalls Company, 1939). P. 571.

"Psychical Research," in *Britannica Book of the Year 1939*. *Encyclopedia Britannica* (Chicago: Encyclopedia Britannica Co., 1939). P. 543C.

ROBERTS, JOHN H. Mathematics.

—(with N. E. Steenrod), "Monotone Transformations of 2-Dimensional Manifolds," *Annals of Mathematics*, XXXIX, 851-862 (Oct., 1938).

"Note on Topological Mappings," *Duke Mathematical Journal*, V, 428-430 (June, 1939).

**ROGERS, ROBERT SAMUEL Latin.

"Tacitus' Annals VI 10," *Classical Philology*, XXII, 223 (1927).

"The Career of Aemilia Lepida and the Roman Criminal Law," *Transactions of the American Philology Association*, LXI, xlv (1930).

"Lucius Arruntius," *Classical Philology*, XXVI, 31-45 (1931).

"Quinti Veranii Pater et Filius," *Classical Philology*, XXVI, 172-177 (1931).

"The Conspiracy of Agrippina," *Transactions of the American Philology Association*, LXII, 141-168 (1931).

"The Date of the Banishment of the Astrologers," *Classical Philology*, XXVI, 203-204 (1931).

—(with Kenneth Scott), "The Crisis of A.D. 33," *The Clevelandian*, VI, 7, 18 (1931).

"Two Criminal Cases tried before Drusus Caesar," *Classical Philology*, XXVII, 75-79 (1932).

- "Fulvia Paulina C. Scntii Saturnini," *Americon Journal of Philology*, LIII, 252-256 (1932).
- "Der Prozess des Cotta Messalinus," *Hermes*, LXVIII, 121-123 (1933).
- "Ignorance of the Law in Tacitus and Dio: Two Instances from the Reign of Tiberius," *Transactions of the Americon Philology Association*, LXIV, 18-27 (1933).
- "Depreciation of Money in the Roman Empire," *Transactions of the Americon Philology Association*, LXV, xlviii (1934).
- "The Delatores under Tiberius," *Transactions of the American Philology Association*, LXV, lii, liii (1934).
- (with Kenneth Scott and Margaret M. Ward), Edited with Introduction, Notes and Vocabulary, *Coesaris Augusti Res Gestae et Fragmenta* (Boston: D. C. Heath and Company, 1935). xii + 119 pp.
- Criminal Trials and Criminal Legislation under Tiberius* (American Philology Association, Monograph VI, 1935). ix + 216 pp.
- SAYLOR, JOHN H. Chemistry.
- (with Paul Gross and J. C. Rintclen), "Energy and Volume Relations in the Solubilities of Some Ketones in Water," *Journal of Physical Chemistry*, XLIII, 197-205 (Feb., 1939).
- SHARP, D. G. Physics.
- "The Lethal Action of Short Ultraviolet Rays on Several Common Pathogenic Bacteria," *Journal of Bocteriology*, XXXVII, 447-460 (April, 1939).
- SHIPMAN, GEORGE A. Political Science.
- "Research and Public Action," *The Journal of Politics*, I, 76-86 (Feb., 1939).
- "The New School Aid Plan," *West Virginia School Journal*, LXVII, 5-7 (May, 1939).
- SIMPSON, WILLIAM H. Political Science.
- "Legal Aspects of Executive Agreements," *Iowa Law Review*, XXIV, 67-88 (Nov., 1938).
- "The Use of Modi Vivendi in the Settlement of International Disputes," *Rocky Mountain Law Review*, II, 89-100 (Feb., 1939).
- SPENGLER, J. J. Economics.
- "Population Movements, Employment, and Income," *Southern Economic Journal*, V, 129-157 (Oct., 1938).
- "Seed Beds of America," *Journal of Heredity*, XXIX, 475-488 (Dec., 1938).
- France Faces Depopulation* (Durham: Duke University Press, 1938). xi + 313 pp.
- SPONER, H. Physics.
- "Recent Developments in Band Spectroscopy of Polyatomic Molecules," *Occasional Publications of the American Association for the Advancement of Science*, No. 7, 106-116 (1938).
- (with E. Teller), "On the Application of the Franck-Condon Principle to the Absorption Spectrum of HgCl_2 ," (letter to editor), *The Journal of Chemical Physics*, V, 382 (May, 1939).
- (with G. Nordheim, A. L. Sklar, and E. Teller), "Analysis of the Near Ultraviolet Electronic Transition of Benzene," *The Journal of Chemical Physics*, VII, 207-220 (April, 1939).
- STILL, BAYRD History.
- **"Norwegian-Americans and Wisconsin Politics in the Forties," *Norwegian-American Studies and Records*, VIII, 58-65 (1934).
- **"Evidences of the Higher Life on the Frontier," *Journal of the Illinois State Historical Society*, XXVIII, 81-99 (July, 1935).
- **"California's First Constitution: A Reflection of the Political Philosophy of the Frontier," *Pacific Historical Review*, IV, 221-234 (Sept., 1935).

- **"State-Making in Wisconsin: 1846-1848: An Illustration of the Statehood Process," *Wisconsin Magazine of History*, XX, 34-59 (Sept., 1936).
- **"An Interpretation of the Statehood Process, 1800-1850," *Mississippi Valley Historical Review*, XXIII, 189-204 (Sept., 1936).
- (with William Herrmann), "Abner Morse's Diary of Emigrant Travel, 1855-56," *Wisconsin Magazine of History*, XXII, 195-212 (Dec., 1938).
- (with William Herrmann), "Abner Morse's Diary," *Wisconsin Magazine of History*, XXII, 329-343 (March, 1939).
- (with William Herrmann), "Abner Morse's Diary: River Falls, 1859-1861," *Wisconsin Magazine of History*, XXII, 427-434 (June, 1939).
- STUART, CHARLES E. Psychology.
 "The Effect of Rate of Movement in Card Matching Tests of Extra-Sensory Perception," *Journal of Parapsychology*, II, 171-183 (Sept., 1938).
- "Some Unsolved Problems of Methodology," *Journal of Parapsychology*, III, 100-104 (June, 1939).
- SUNDERLAND, ELIZABETH R. Fine Arts.
 "The History and Architecture of the Church of Saint Fortunatus at Charlieu in Burgundy," *The Art Bulletin*, XXI, 61-88 (March, 1939).
- THOMAS, J. M. Mathematics.
Theory of Equations (New York: McGraw-Hill Book Company, 1938). 211 pp.
- THOMPSON, EDGAR T. Sociology.
 "The Community Survey as a Means of Social Action," in *1939 Handbook of the North Carolina County Councils of Social Agencies* (Raleigh: State Board of Charities and Public Welfare, 1939).
- "Introduction," pp. v-xiv; "The Plantation: The Physical Basis of Traditional Race Relations," pp. 180-218; "A Bibliography on Race Relations," pp. 307-328, in *Race Relations and the Race Problem* (Durham: Duke University Press, 1939). xv + 338 pp.
- TILLEY, NANNIE M. Library.
 "England and the Confederacy," *The American Historical Review*, XLIV, 56-60 (Oct., 1938).
- VOLLMER, CLEMENT German.
 "Mark Twain and His German Critics," *Germany and You*, IX, 120-140 (April, 1939).
- VOSBURGH, WARREN C. Chemistry.
 —(with Gerald Cooper, William J. Clayton, and Harry Pfann), "Gravimetric Determination of Zinc by the Mercuric Thiocyanate Method," *Industrial and Engineering Chemistry* (Anal. ed.), X, 393-394 (July, 1938).
- (with Helen C. Parks), "Saturated Standard Cells with Small Temperature Coefficients. III. Cadmium Bismuth Amalgams of Constant Cadmium Activity," *Journal of the American Chemical Society*, LXI, 652-654 (March, 1939).
- WARD, CHARLES E. English.
 "An Unpublished Dryden Letter," *London Times Literary Supplement*, p. 700 (Oct. 29, 1938).
- "Dryden's 'Spanish Friar' and a Provincial Touring Company," *Notes and Queries*, CLXXVI, 96-97 (Feb., 1939).
- WELFLING, WELDON Economics.
Savings Banking in New York State (Durham: Duke University Press, 1939). 205 pp.
- WHARTON, G. W. Zoology.
 —(with A. S. Pearse), "The Oyster 'Leech,' *Stylochus Inimicus Palombi*, Associated with Oysters on the Coasts of Florida," *Ecological Monographs*, VIII, 605-655 (Oct., 1938).

- "Studies on *Lophotaspis vallei* (Stossich, 1899) (Trematoda: Aspidogastriidae)," *Journal of Parasitology*, XXV, 83-86 (Feb., 1939).
- WILSON, ROBERT R. Political Science.
 "Anglo-Irish Accord," *American Journal of International Law*, XXXII, 545-547 (July, 1938).
 "Gradations of Citizenship and International Reclamations," *American Journal of International Law*, XXXIII, 146-148 (Jan., 1939).
- WOLF, F. A. Botany.
 —(with Fred T. Wolf), "The Snail *Polygyra thyroidus* as a Mycophagist," *Bulletin of the Torrey Botanical Club*, LXVI, 1-5 (Jan., 1939).
 —(with J. A. Pinckard, Ruth McLean, F. R. Darkis, and P. M. Gross), "Laboratory Studies on Toxicity of Benzol Vapors to Tobacco Seedlings and to *Peronospora Tabacina*," *Phytopathology*, XXIX, 177-187 (Feb., 1939).
 —(with J. A. Pinckard, F. R. Darkis, Ruth McLean, and P. M. Gross), "Field Studies on Concentration of Benzol Vapors as Used to Control Downy Mildew of Tobacco," *Phytopathology*, XXIX, 103-120 (Feb., 1939).
 "Status of Investigations of Tobacco Downy Mildew," *Phytopathology*, XXIX, 194-200 (Feb., 1939).
 "Downy Mildew of Tobacco in Brazil," *Phytopathology*, XXIX, 291 (March, 1939).
- WOODY, R. H. History.
 "Collector—The George Washington Flowers Collection" (in *In Memoriam William Kenneth Boyd*), *Historical Papers of the Trinity College Historical Society*, XXII, 19-69 (1938).
- ZENER, KARL E. Psychology.
 "William McDougall," *Science*, LXXXIX, 2305, 191-192 (March, 1939).
 "An Experimental Investigation of the Role of Drive in the Acquisition and Performance of Conditioned Responses," *Science*, LXXXVIII, 2290, 478-479 (Nov., 1938).
 "Analysis of Motivational Factors in Conditioned Behavior: I. The Differential Effect of Changes in Hunger upon Conditioned, Unconditioned, and Spontaneous Salivary Secretion," *Journal of Psychology*, VIII, 321-350 (1939).

PUBLICATIONS OF THE MEMBERS OF THE FACULTY OF THE
 SCHOOL OF RELIGION DURING THE PERIOD
 JULY 1, 1938, TO JUNE 30, 1939

- BRANSCOMB, HARVIE.
 "The Biblical Doctrine of the Holy," *Religion in Life*, VIII, 195 (1939).
- GARBER, PAUL N.
The Methodists Are One People (Nashville: The Cokesbury Press, 1939). 144 pp.
 "The Circuit Rider's Horse," *World Outlook*, 340-342 (Sept., 1938).
 "The Spread of Methodism to 1844," *World Outlook*, 7-11 (May, 1939).
- MYERS, H. E.
 "Simon Peter," *Church School Mosaic*, LXIX, 1-2, 39 (Jan., 1939).
- ORMOND, J. M.
 "Training Workers for the Rural Field," *Scorritt College Voice*, X, 7-8 (Sept., 1938).
- PETRY, RAY C.
 "St. Francis, Society, and the Ultimate Order," *Duke School of Religion Bulletin*, IV, 29-33 (May, 1939).

STINESPRING, W. F.

"Gerasa, City of the Decapolis," Chapter I in *The History of Excavation at Jerash* (New Haven: The American School of Oriental Research, 1938). Pp. 1-10.

"Edward Robinson in Jerusalem," *Duke School of Religion Bulletin*, IV, 10-16 (Feb., 1939).

PUBLICATIONS OF THE MEMBERS OF THE LAW FACULTY DURING THE PERIOD JULY 1, 1938, TO JUNE 30, 1939

BRADWAY, JOHN S.

"Some Domestic Relations Laws that Counsellors in Marital Difficulties Need to Know," *Social Forces*, XVII, 83-89 (Oct., 1938).

"Low Cost Legal Service Bureaus," *North Carolina Law Review*, XVII, 101-117 (Feb., 1939).

"The Objectives of Legal Aid Clinic Work," *Washington University Law Quarterly*, XXIV, 173-192 (Feb., 1939).

"The Classroom Aspects of Legal Aid Clinic Work," *Brooklyn Law Review*, VIII, 373-396 (May, 1939).

—(with H. M. Taylor), "The Teaching of Legal Medicine," *The American Journal of Medical Jurisprudence*, II, 210-213 (May-June, 1939).

"Legal Aid," *Social Work Year Book*, pp. 229-232 (1939).

Special Editor (with Foreword): *Law and Contemporary Problems*, VI, "Symposium on Alimony" (Spring, 1939).

CAVERS, DAVID F.

"The Food, Drug, and Cosmetic Act of 1938: Its Legislative History and Its Substantive Provisions," *Law and Contemporary Problems*, VI, 2-42 (Winter, 1939).

"The North Carolina Food, Drug, and Cosmetic Act," *North Carolina Law Review*, XVII, 400-415 (June, 1939).

HORACK, H. C.

"Admission to the Bar: Securing Proper Bar Examinations," *Illinois Law Review*, XXXIII, 891-898 (April, 1939).

LOWNDES, C. L. B.

"Taxation and the Supreme Court, 1937 Term" (Part I), *University of Pennsylvania Law Review*, LXXXVII, 1-33 (Nov., 1938).

"Taxation and the Supreme Court, 1937 Term" (Part II), *University of Pennsylvania Law Review*, LXXXVII, 165-200 (Dec., 1938).

MCDERMOTT, MALCOLM.

"To What Extent Should Decisions of Administrative Bodies Be Reviewable by Courts?" (Ross Prize Essay, 1939), *American Bar Association Journal*, XXV, 453-460 (June, 1939).

Translated (with Raphael Lemkin) with Foreword: *The Polish Penal Code of 1932, and the Law of Minor Offenses* (Durham: Duke University Press, 1939). 95 pp.

MAGGS, DOUGLAS B.

General Editor: *Selected Essays in Constitutional Law* (Chicago: The Foundation Press, 1938). 4 vols.

POTEAT, J. DOUGLASS.

"State Legislative Relief for the Mortgage Debtor During the Depression," *Law and Contemporary Problems*, V, 517-544 (Autumn, 1938).

ROALFE, WILLIAM R.

"The Relation of the Library to Legal Education," *Law Library Journal*, XXXI, 141-155 (July, 1938).

"The Essentials of An Effective Law School Library Service," *Law Library Journal*, XXXI, 335-352 (Nov., 1938).

"Some Suggestions for Improving the Law School Library Service," *Law Library Journal*, XXXII, 1-15 (Jan., 1939).

"The Increasing Need for Bar Libraries in the Smaller Cities," *American Bar Association Journal*, XXV, 509-510 (June, 1939).

SANDERS, PAUL H.

"Pardon in the Attorney General's Survey of Release Procedures," *Federal Probation*, III, 26-29 (May, 1939).

Special Editor (with Foreword): *Law and Contemporary Problems*, VI, "Symposium on the Wage and Hour Law" (Summer, 1939).

PUBLICATIONS OF THE MEMBERS OF THE FACULTY OF THE SCHOOL OF FORESTRY DURING THE PERIOD JULY 1, 1938, TO JUNE 30, 1939

*BEAL, JAMES ALLEN.

"Frost Killed Oak," *Journal of Forestry*, XXIV, 949-950 (1926).

"Weather as a Factor in Southern Pine Beetle Control," *Journal of Forestry*, XXV, 741-742 (1927).

"The Development of the Proventriculus of *Pityogenes Hopkinsi* Swaine," *Annals Entomological Society of America*, XX, 522-529 (1927).

—(with R. A. St. George), "The Southern Pine Beetle: a Serious Enemy of Pines in the South," *United States Department of Agriculture Farmers' Bulletin*, No. 1586 (1929). 18 pp.

—(with R. M. Nelson), "Experiments with Bluestain Fungi in Southern Pines," *Phytopathology*, XIX, 1101-1106 (1929).

"Control of the Turpentine Borer in the Naval Stores Region," *United States Department of Agriculture Circular*, No. 226 (1932). 19 pp.

—(with R. A. St. George), "New Sprays Effective in Control of the Locust Borer," *Journal of Economic Entomology*, XXV, 713-721 (1932).

"Temperature Extremes as a Factor in the Ecology of the Southern Pine Beetle," *Journal of Forestry*, XXXI, 329-336 (1933).

"Relation of Air and Bark Temperatures of Infested Ponderosa Pines During Subzero Weather," *Journal of Economic Entomology* XXVII, 1132-1139 (1934).

—(with J. W. Kimmey and E. F. Rapraeger), "Deterioration of Fire Killed Douglas Fir," *The Timberman*, XXXVII, 12-17 (1935).

COILE, THEODORE STANLEY.

"Forest Classification: Classification of Forest Sites with Special Reference to Ground Vegetation," *Journal of Forestry*, XXXVI, 1062-1066 (1938).

—(with C. F. Korstian), "Plant Competition in Forest Stands," *Duke University School of Forestry Bulletin*, III (1938). 134 pp.

"Podzol Soils in the Southern Appalachian Mountains," *Proceedings of Soil Science Society of America*, III, 274-279 (1939).

"Forest Soil Fertility: Influence of Stand Composition on Nitrogen Transformation in the Surface Soil," *Proceedings of Soil Science Society of America*, III, 225-229 (1939).

"Influence of Incorporated Organic Matter on the Moisture Equivalent and Wilting Percentage of Soils," *Proceedings of Soil Science Society of America*, III, 43 (1939).

KORSTIAN, C. F.

—(with T. S. Coile), "Plant Competition in Forest Stands," *Duke University School of Forestry Bulletin*, III (1938). 134 pp.

MAUGHAN, WILLIAM.

Editor: *A Guide to Forestry Activities in North Carolina, South Carolina, and Tennessee* (Asheville: Appalachian Section, Society of American Foresters, 1939). 287 pp.

SCHUMACHER, FRANCIS XAVIER.

"Comments on a Comparison of Two Methods of Yield Table Construction," *Journal of Forestry*, XXXVI, 684-686 (1938).

"New Concepts in Forest Mensuration," *Journal of Forestry*, XXXVI, 847-849 (1938).

WOLF, FREDERICK ADOLPHUS.

—(with H. K. Garren and J. K. Miller), "Fungi of the Duke Forest and Their Relation to Forest Pathology," *Duke University School of Forestry Bulletin*, II (1938). 122 pp.

—(with F. T. Wolf), "A Study of *Botryosphaeria Ribis* on Willow," *Mycology*, XXXI, 217-227 (1939).

"Leafspot of Ash and *Phyllosticta Viridis*," *Mycology*, XXXI, 258-266 (1939).

PUBLICATIONS OF THE MEMBERS OF THE FACULTY OF
MEDICINE DURING THE PERIOD JULY 1, 1938,
TO JUNE 30, 1939

ALTWATER, F. V. Hospital Administration.

***"Flat Rates for Four and One-half Years," *Modern Hospital*, XLIX, 47-48 (Dec., 1937).

ALYEA, E. P. Urology.

"Cystoscopic Removal of Large Ureteral Calculi," *Journal of Urology*, XL, 83-100 (July, 1938).

—(with W. E. Daniel), "Sulfanilyl-sulfanilamide Therapy in Sulfanilamide-resistant Gonorrhea," *Southern Medical Journal*, XXXII, 608-613 (June, 1939).

—(with W. E. Daniel and A. Yates), "Sulfanilamide and Disulfanilamide Concentrations in Blood and Urine," *Journal of Urology*, XLI, 14-30 (Jan., 1939).

ANDERSON, W. A. D. Pathology.

"Renal Lesion in Hyperparathyroidism," *Endocrinology*, XXIV, 372-378 (March, 1939).

ARENA, J. M. Pediatrics.

"Cerebral Vascular Lesions Accompanying Sick-cell Anemia," *Journal of Pediatrics*, XIV, 745-751 (June, 1939).

—(with J. M. Martin), "Lye Poisoning and Stricture of Esophagus: Report of 50 Cases," *Southern Medical Journal*, XXXII, 286-290 (March, 1939).

—(with L. P. Rasmussen), "Diphtheritic Polyneuritis: Report of 9 Cases," *Journal of Pediatrics*, XIII, 352-356 (Sept., 1938).

ASHLEY, C. Obstetrics and Gynecology.

—(with E. C. Hamblen and M. Baptist), "Sodium Pregnanediol Glucuronide: Significance of Its Excretion in Urine," *Endocrinology*, XXIV, 1-12 (Jan., 1939).

BAKER, L. D. Orthopedics.

—(with O. L. Miller), "Fracture and Fracture-dislocation of Astragalus," *Southern Medical Journal*, XXXII, 123-136 (Feb., 1939).

BAKER, R. D. Pathology.

"Comparison of Infection of Mice by Mycelial and Yeast Forms of *Blastomyces Dermatitidis*," *Journal of Infectious Diseases*, LXIII, 324-329 (Nov.-Dec., 1938).

BAPTIST, M. Obstetrics and Gynecology.

—(with E. C. Hamblen and C. Ashley), "Sodium Pregnanediol Glucuronide: Significance of Its Excretion in Urine," *Endocrinology*, XXIV, 1-12 (Jan., 1939).

BEARD, J. W. Experimental Surgery.

- (with H. Finkelstein and R. W. G. Wyckoff), "pH-Stability of Elementary Bodies of Vaccinia," *Journal of Immunology*, XXXV, 415-425 (Dec., 1938).
- (with H. Finkelstein, W. Marx, and W. H. Bridgers), "Rate of Inactivation of Equine Encephalomyelitis Virus (Eastern Strain) Relative to H Ion Concentration," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 103-105 (Oct., 1938).
- (with B. Woodhall and R. W. Graves), "Experimental Production of Tumors of Brain with Shope Rabbit Papilloma," *Archives of Surgery*, XXXVIII, 457-470 (March, 1939).

BERNHEIM, F. Physiology and Pharmacology.

- (with M. L. C. Bernheim), "Action of P-Aminophenol on Tissue Oxidations," *Science*, LXXXVI, 197 (Aug., 1937).
- (with M. L. C. Bernheim), "Hydrolysis of Homatropine and Atropine by Various Tissues," *Journal of Pharmacology and Experimental Therapeutics*, LXIV, 209-216 (Oct., 1938).
- (with M. L. C. Bernheim), "Action of Vanadium on Tissue Oxidations," *Science*, LXXXVIII, 481-482 (Nov., 1938).
- (with M. L. C. Bernheim), "Action of Vanadium on Oxidation of Phospholipids by Certain Tissues," *Journal of Biological Chemistry*, CXXVII, 353-360 (Feb., 1939).
- (with M. L. C. Bernheim), "Effect of Titanium on Oxidation of Sulfhydryl Groups by Various Tissues," *Journal of Biological Chemistry*, CXXVII, 695-703 (March, 1939).
- (with M. L. C. Bernheim), "Note on Action of Manganese and some Other Metals on Oxidation of Certain Substances by Liver," *Journal of Biological Chemistry*, CXXVIII, 79-82 (April, 1939).
- (with M. L. C. Bernheim and H. O. Michel), "Effect of Pyrrole on Oxidation of Amines and Non-neutral Isomers of Certain Amino Acids," *Journal of Biological Chemistry*, CXXVI, 273-285 (Nov., 1938).

BERNHEIM, M. L. C. Biochemistry.

- (with F. Bernheim), "Action of P-Aminophenol on Tissue Oxidations," *Science*, LXXXVI, 197 (Aug., 1937).
- (with F. Bernheim), "Hydrolysis of Homatropine and Atropine by Various Tissues," *Journal of Pharmacology and Experimental Therapeutics*, LXIV, 209-216 (Oct., 1938).
- (with F. Bernheim), "Action of Vanadium on Tissue Oxidations," *Science*, LXXXVIII, 481-482 (Nov., 1938).
- (with F. Bernheim), "Action of Vanadium on Oxidation of Phospholipids by Certain Tissues," *Journal of Biological Chemistry*, CXXVII, 353-360 (Feb., 1939).
- (with F. Bernheim), "Effect of Titanium on Oxidation of Sulfhydryl Groups by Various Tissues," *Journal of Biological Chemistry*, CXXVII, 695-703 (March, 1939).
- (with F. Bernheim), "Note on Action of Manganese and Some Other Metals on Oxidation of Certain Substances by Liver," *Journal of Biological Chemistry*, CXXVIII, 79-82 (April, 1939).
- (with F. Bernheim and H. O. Michel), "Effect of Pyrrole on Oxidation of Amines and Non-neutral Isomers of Certain Amino Acids," *Journal of Biological Chemistry*, CXXVI, 273-285 (Nov., 1938).
- **—(with F. Bernheim), "Action of P-Aminophenol on Xanthine Oxidase of Liver," *Journal of Biological Chemistry*, CXXIII, 307-315 (March, 1938).

- **—(with F. Bernheim), "Choline Oxidase of Liver," *American Journal of Physiology*, CXXI, 55-60 (Jan., 1938).
- **—(with F. Bernheim), "Oxidation of Mescaline and Certain Other Amines," *Journal of Biological Chemistry*, CXXIII, 317-326 (March, 1938).
- BRADFORD, W. Z. Obstetrics and Gynecology.
"History of Previous Pregnancies," *Southern Medicine and Surgery*, CI, 178-179 (April, 1939).
- BRIDGERS, W. H. Surgery.
"Cerebral Vascular Diseases Accompanying Sickle-cell Anemia," *American Journal of Pathology*, XV, 353-361 (May, 1939).
- (with H. Finkelstein, W. Marx, and J. W. Beard), "Rate of Inactivation of Equine Encephalomyelitis Virus (Eastern Strain) Relative to H Ion Concentration," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 103-105 (Oct., 1938).
- BURNS, M. V. Dermatology.
—(with H. I. Harvey, D. T. Smith, and E. L. Persons), "Effect of Various Fractions of Liver on Experimental Canine Blacktongue," *Journal of Nutrition*, XVI, 153-171 (Aug., 1938).
- CARTER, B. Obstetrics and Gynecology.
—(with C. P. Jones and W. L. Thomas), "Attempted Cultivation of Donovan Bodies from Granuloma Inguinale," *Journal of Infectious Diseases*, LXIV, 314-316 (May-June, 1939).
- (with W. L. Thomas and R. L. Pearse), "Dermoid Cyst of Ovary with Perforation of Urinary Bladder and Sigmoid," *American Journal of Obstetrics and Gynecology*, XXXVII, 148-153 (Jan., 1939).
- COOLIDGE, T. B. Biochemistry.
"Simple Cataphoresis Apparatus," *Journal of Biological Chemistry*, CXXVII, 551-553 (Feb., 1939).
- CRISPELL, R. S. Neuropsychiatry.
"Place of Neuropsychiatry in Modern Education and Practice," *Southern Medicine and Surgery*, C, 579-584 (Dec., 1938).
- "Constitutional Medicine," *Southern Medicine and Surgery*, CI, 255-260 (June, 1939).
- DANIEL, W. E. Urology.
"Urethral Stricture in Female," *Urologic and Cutaneous Review*, XLIII, 269-271 (April, 1939).
- (with E. P. Alyea), "Sulfanilyl-sulfanilamide Therapy in Sulfanilamide-resistant Gonorrhea," *Southern Medical Journal*, XXXII, 608-613 (June, 1939).
- DANN, W. J. Physiology and Nutrition.
"Possible Clinical Significance of Factors of Vitamin B₂ Complex other than Nicotinic Acid," *American Journal of Tropical Medicine*, XIX, 219-227 (May, 1939).
- (with Y. Subarrow), "Differentiation of Rat Dermatitis Factor and Chick Dermatitis Factor from Nicotinic Acid," *Journal of Nutrition*, XVI, 183-195 (Aug., 1938).
- DAVISON, W. C. Pediatrics.
"Evolution of Therapy—Plea for Treating Patient as Well as His Disease," *Southern Medicine and Surgery*, C, 457-458 (Oct., 1938).
- "Future of American Pediatrics," *Journal of Pediatrics*, XIV, 810-814 (June, 1939).
- (with J. Mignone), "Conditions Characterized by Acute Abdominal Symptoms in Childhood," *Southern Medicine and Surgery*, C, 367-371 (Aug., 1938).

DEVINE, J. W. Surgery.

—(with D. Hart and D. W. Martin), "Bactericidal and Fungicidal Effect of Ultraviolet Radiation: Use of Special Unit for Sterilizing Air in Operating Room," *Archives of Surgery*, XXXVIII, 806-815 (May, 1939).

DICK, M. Physiology and Pharmacology.

—(with J. M. Ruffin), "Significance of Gastric Acidity After Histamine Stimulation: Statistical Study of 2877 Gastric Analyses," *Annals of Internal Medicine*, XI, 1940-1947 (June, 1939).

DILL, L. V. Pathology.

"Observations on Incidence of Latent Paroxysmal Hemoglobinuria as Evidenced by Donath-Landsteiner Phenomenon," *American Journal of Syphilis, Gonorrhea and Venereal Diseases*, XXI, 220-223 (March, 1939).

—(with C. C. Erickson), "Eclampsia-like Syndrome Occurring in Pregnant Dogs and Rabbits Following Renal Constriction," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 362-265 (Nov., 1938).

—(with C. E. Isenhour), "Etiologic Factors in Experimentally Produced Pontile Hemorrhages," *Archives of Neurology and Psychiatry*, XL, 1146-1152 (June, 1939).

EAGLE, W. W. Otolaryngology.

"Pharyngeal Bursae (Thornwaldt's Bursae); Report of 64 Cases," *Laryngoscope*, XLIX, 199-207 (March, 1939).

ERICKSON, C. C. Pathology.

—(with L. V. Dill), "Eclampsia-like Syndrome Occurring in Pregnant Dogs and Rabbits Following Renal Constriction," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 362-365 (Nov., 1938).

FARRAR, J. Library.

—(with G. T. Harrell), "'Oeuvres' of Ambroise Paré," *Annals of Medical History*, X, 358 (July, 1938).

FINKLESTEIN, H. Surgery.

—(with W. Marx, W. H. Bridgers, and J. W. Beard), "Rate of Inactivation of Equine Encephalomyelitis Virus (Eastern Strain) Relative to H Ion Concentration," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 103-105 (Oct., 1938).

—(with J. W. Beard and R. W. G. Wyckoff), "pH Stability of Elementary Bodies of Vaccinia," *Journal of Immunology*, XXXV, 415-425 (Dec., 1938).

FORBUS, W. D. Pathology.

***"Pathological Problems of Small Hospital—Practical Solution," *Proceedings of the Joint Meeting of the North Carolina, South Carolina and Virginia Hospital Associations*, 3-13 (April, 1934).

"'Death of the Sentence' in Medicine," *Southern Medical Journal*, XXXI, 792-796 (July, 1938).

GARDINER, A. H. Nursing.

***"Creating Right Physical Environment for Patient," section in Smith and Broadhurst's *Introduction to Principles of Nursing Care* (Philadelphia: Lippincott, 1937). Pp. 236-298.

—(with Mabel H. Gardiner), *Chronicles of Old Berkeley; A Narrative History of a Virginia County from Its Beginning to 1926* (Durham, N. C.: The Seeman Printery, 1938). 323 pp. Illustrated.

GARDNER, C. E., JR. Surgery.

"Delayed Operation in Treatment of Perforated Appendix," *Surgery*, IV, 161-178 (Aug., 1938).

"Conservative Management of Appendical Peritonitis," *Southern Medical Journal*, XXXII, 157-168 (Feb., 1939).

GRAVES, R. W. Neurology.

—(with B. Woodhall and J. W. Beard), "Experimental Production of Tumors of Brain with Shope Rabbit Papilloma," *Archives of Surgery*, XXXVIII, 457-470 (March, 1939).

HAMLEN, E. C. Obstetrics and Gynecology.

"Observations on Clinical Employment of Pituitary and Pituitary-like Gonadotropic Principles in Certain Conditions Characterized by Failure of Ovulation," *American Journal of Surgery*, XLI, 35-38 (July, 1938).

"Therapeutic Use of Sex Sterols in Functional Meno-metrorrhagia," *Endocrinology*, XXIV, 13-28 (Jan., 1939).

"Syndrome Characterized by Premenstrual Dermatoses, Polyhypermenorrhea, Menstrual Headache and Increased Urinary Excretion of Sodium Pregnanediol Glucuronide," *Endocrinology*, XXIV, 269-273 (Feb., 1939).

"Clinical Correlates of Functional Uterine Bleeding," *Southern Medical Journal*, XXXII, 308-319 (March, 1939).

"Clinical Evaluation on Ovarian Responses to Gonadotopic Therapy," *Endocrinology*, XXXIV, 848-866 (June, 1939).

"Responses of Human Gonads to Anterior Pituitary and Anterior Pituitary-like Principles," in *Cyclopedia of Medicine, Revision Service* (G. M. Piersol, editor-in-chief; Philadelphia: F. A. Davis Co., 1939). Vol. V, p. 754.

—(with C. Ashley and M. Baptist), "Sodium Pregnanediol Glucuronide: Significance of Its Excretion in Urine," *Endocrinology*, XXIV, 1-12 (Jan., 1939).

HANES, F. M. Medicine.

"Chronic Bromide Intoxication," section in *Oxford Medicine*, by various authors (New York: Oxford University Press, 1936). Vol. IV, p. 664(55)-664(65), (1938).

"Meningococcus Infection," *International Clinics*, III, 261-264 (Sept., 1938).

"Obesity," *International Clinics*, III, 264-270 (Sept., 1938).

"Hyperparathyroidism Due to Parathyroid Adenoma, With Death from Parathormone Intoxication," *American Journal of the Medical Sciences*, CXCVII, 85-90 (Jan., 1939).

HANSEN-PRÜSS, O. C. Medicine.

"Urticaria of Bacterial Origin," *Journal of Allergy*, IX, 577-583 (Sept., 1938).

HARRELL, G. T. Pathology.

—(with J. Farrar), "'Oeuvres' of Ambroise Paré," *Annals of Medical History*, X, 358 (July, 1938).

HARRIS, J. S. Pediatrics.

—(with J. R. Klein), "Acetylation of Sulfanilamide in Vitro," *Journal of Biological Chemistry*, CXXIV, 613-626 (Aug., 1938).

HART, D. Surgery.

"Traumatic Injuries of Thorax," *Journal of the South Carolina Medical Association*, XXXIV, 175-179 (July, 1938).

"Pathogenic Bacteria in Air in Operating Rooms: Their Widespread Distribution and Methods of Control," *Archives of Surgery*, XXXVII, 521-530 (Oct., 1938).

"Sterilization of Air in Operating Room by Bactericidal Radiant Energy: Results in Over 800 Operations," *Archives of Surgery*, XXXVII, 956-972 (Dec., 1938).

"Training a Surgeon," *Bulletin of the American College of Surgeons*, XXIV, 58-59 (Jan., 1939).

- "Bactericidal and Fungicidal Effect of Ultraviolet Radiation: Use of Special Unit in Operating Room," *Archives of Surgery*, XXXVIII, 806-815 (May, 1939).
- (with J. W. Devine and D. W. Martin), "Bactericidal and Fungicidal Effect of Ultraviolet Radiation: Use of Special Unit for Sterilizing Air in Operating Room," *Archives of Surgery*, XXXVIII, 806-815 (May, 1939).
- (with P. W. Sanger), "Role of Respiratory Tract in Contamination of Air: Comparative Study," *Archives of Surgery*, XXXVIII, 788-796 (April, 1939).
- (with P. W. Sanger), "Effect on Wound Healing of Bactericidal Ultraviolet Radiation from Special Unit Experimental Study," *Archives of Surgery*, XXXVIII, 797-805 (May, 1939).
- (with H. M. Schiebel), "Role of Respiratory Tract in Contamination of Air: Comparative Study," *Archives of Surgery*, XXXVIII, 788-796 (April, 1939).
- HARVEY, H. I. Medicine.
- (with D. T. Smith, E. L. Persons, and M. V. Burns), "Effect of Various Fractions of Liver on Experimental Canine Blacktongue," *Journal of Nutrition*, XVI, 153-171 (Aug., 1938).
- HOLLINSHEAD, W. H. Anatomy.
- "Afferent Nature of Innervation of Glonni Aortici," *Anatomical Record*, LXXIII (supplement), 67 (March, 1939).
- HOOKE, C. W. Medicine.
- (with B. Cunningham), "Regeneration of Testis in Fowl, and Its Bearing on Germ-cell Theory," *Anatomical Record*, LXXII, 371-383 (Nov., 1938).
- (with D. H. Sprunt), "Relation of Spermatogenesis to Factor in Testis which Increases Tissue Permeability," *Proceedings of the Society for Experimental Biology and Medicine*, XLI, 398-402 (June, 1939).
- (with G. C. Newman), "Effect of Iodine on Interstitial Cells of Testis," *Endocrinology*, XXIV, 720-722 (May, 1939).
- HORACK, H. M. Medicine.
- "Allergy as a Factor in Development of Reactions to Anti-rabic Treatment," *American Journal of the Medical Sciences*, CXCVII, 672-682 (May, 1939).
- ISENHOUR, C. E. Pathology.
- (with L. V. Dill), "Etiologic Factors in Experimentally Produced Pontile Hemorrhages," *Archives of Neurology and Psychiatry*, XLI, 1146-1152 (June, 1939).
- JONES, C. P. Obstetrics and Gynecology.
- (with B. Carter and W. L. Thomas), "Attempted Cultivation of Donovan Bodies from Granuloma Inguinale," *Journal of Infectious Diseases*, LXIV, 314-316 (May-June, 1939).
- JONES, N. Nursing.
- "Polyarthrititis—Nursing Care," *American Journal of Nursing*, XXXIX, 296-300 (March, 1939).
- KELLEY, W. H. Medicine.
- "Study of Cell and Colony Variations of Blastomyces Dermatitis," *Journal of Infectious Diseases*, LXIV, 293-296 (May-June, 1939).
- KEMPNER, W. Medicine.
- **"Inhibitory Effect of Low Tension on Deamination of Amino Acids in Kidney," *Journal of Biological Chemistry*, CXXIV, 229-235 (June, 1938).

- "Anoxemia of Kidney as Cause of Uremic Acidosis: Inhibitory Effect of Low Oxygen Tension on Deamination of Amino Acids in Kidney Tissue," *American Journal of Physiology*, CXXIII, 117-118 (July, 1938).
- "Verminderter Sauerstoffdruck in der Niere als Ursache der 'Reversiblen' Urämischen Acidose," *Klinische W'ochenschrift*, XVII, 971-973 (July, 1938).
- "Nature of Leukemic Blood Cells as Determined by Their Metabolism," *Journal of Clinical Investigation*, XVIII, 291-300 (May, 1939).
- KLEIN, J. R. Biochemistry.
- "Effect of Thyroid Feeding and Thyroidectomy on Oxidation of Amino Acids by Rat Kidney and Liver," *Journal of Biological Chemistry*, CXXVIII, 659-663 (May, 1939).
- (with J. S. Harris), "Acetylation of Sulfanilamide in Vitro," *Journal of Biological Chemistry*, CXXIV, 613-626 (Aug., 1938).
- KOHN, H. I. Physiology and Pharmacology.
- "Concentration of Coenzyme-like Substance in Blood Following Administration of Nicotinic Acid to Normal Individuals and Pellagrins," *Biochemical Journal*, XXXII, 2075-2083 (Dec., 1938).
- MACCOLL, W. A. Pediatrics.
- "Clinical Experience with Sulfapyridine: Report of 33 Cases," *Journal of Pediatrics*, XIV, 277-289 (March, 1939).
- MARGOLIS, G. Medicine.
- (with L. H. Margolis and S. G. Smith), "Cure of Experimental Canine Blacktongue with Optimal and Minimal Doses of Nicotinic Acid," *Journal of Nutrition*, XVI, 541-548 (Dec., 1938).
- (with L. H. Margolis and S. G. Smith), "Secondary Deficiency of Vitamin B₁ and Riboflavin in Blacktongue Producing Diet," *Journal of Nutrition*, XVII, 63-76 (Jan., 1939).
- MARGOLIS, L. H. Medicine.
- (with G. Margolis and S. G. Smith), "Secondary Deficiency of Vitamin B₁ and Riboflavin in Blacktongue Producing Diet," *Journal of Nutrition*, XVII, 63-76 (Jan., 1939).
- (with G. Margolis and S. G. Smith), "Cure of Experimental Blacktongue with Optimal and Minimal Doses of Nicotinic Acid," *Journal of Nutrition*, XVI, 541-548 (Dec., 1938).
- MARTIN, D. S. Bacteriology and Medicine.
- "Antigenic Similarity of Fungus *Cadophora Americana* Isolated from Wood Pulp to *Phialophora Verrucosa* Isolated from Patients with Dermatitis Verrucosa (Chromoblastomycosis)," *American Journal of Tropical Medicine*, XVIII, 421-426 (July, 1938).
- (with D. T. Smith), "Blastomycosis (American Blastomycosis, Gilchrist's Disease); Report of 13 New Cases," *American Review of Tuberculosis*, XXXIX, 488-515 (April, 1939).
- (with D. T. Smith), "Blastomycosis (American Blastomycosis, Gilchrist's Disease); Review of Literature," *American Review of Tuberculosis*, XXXIX, 275-304 (March, 1939).
- MARTIN, D. W. Surgery.
- (with D. Hart and J. W. Devine), "Bactericidal and Fungicidal Effect of Ultraviolet Radiation: Use of Special Unit for Sterilizing Air in Operating Room," *Archives of Surgery*, XXXVIII, 805-815 (May, 1939).
- MARTIN, J. M. Pediatrics.
- (with J. M. Arena), "Lye Poisoning and Stricture of Esophagus: Report of 50 Cases," *Southern Medical Journal*, XXXII, 286-290 (March, 1939).

MARX, W. Surgery and Biochemistry.

- (with H. Finkelstein, W. H. Bridgers, and J. W. Beard), "Rate of Inactivation of Equine Encephalomyelitis Virus (Eastern Strain) Relative to H Ion Concentration," *Proceedings of the Society for Experimental Biology and Medicine*, XXXIX, 103-105 (Oct., 1938).

MENEFEE, E. E., JR. Bacteriology and Medicine.

- (with M. A. Poston), "Effects of Sulfanilamide on *Brucella Melitensis*, Var. *Melitensis*, Abortus and Suis," *Journal of Bacteriology*, XXXVII, 269-276 (March, 1939).
- (with M. A. Poston), "Chronic Brucellosis of 25 Months' Duration: Report of Case with Necropsy Findings," *Southern Medical Journal*, XXXI, 1061-1062 (Oct., 1938).
- (with M. A. Poston), "Significance of Standard Laboratory Procedures in Diagnosis of Brucellosis," *American Journal of the Medical Sciences*, CXC VII, 646-653 (May, 1939).
- (with M. A. Poston), "Acute Brucellosis with Bacteremia and Oral Lesions: Treatment with Immune Human Blood," *New England Journal of Medicine*, CCXIX, 796-797 (Nov., 1938).

MICHEL, H. O. Biochemistry.

- "Study of Sulphemoglobin," *Journal of Biological Chemistry*, CXXVI, 323-348 (Nov., 1938).
- (with F. Bernheim and M. L. C. Bernheim), "Effect of Pyrrole on Oxidation of Amines and Non-neutral Isomers of Certain Amino Acids," *Journal of Biological Chemistry*, CXXVI, 273-285 (Nov., 1938).

MIGNONE, J. Pediatrics.

- (with W. C. Davison), "Conditions Characterized by Acute Abdominal Symptoms in Childhood," *Southern Medicine and Surgery*, C, 367-371 (Aug., 1938).

MILLER, O. L. Orthopedics.

- (with L. D. Baker), "Fracture and Fracture-dislocation of Astragalus," *Southern Medical Journal*, XXXII, 123-136 (Feb., 1939).

MORGAN, J. E. Roentgenology and Physiology.

- (with R. J. Reeves), "Photo-electric Densitometer," *American Journal of Roentgenology and Radium Therapy*, XL, 610-615 (Oct., 1938).
- (with W. M. Nielsen and K. Z. Morgan), "Rossi Transition Curve for Small Angle Showers," *Physical Review*, LV, 995-997 (June, 1939).

MORTON, H. G. Pediatrics.

- "Atropine Intoxication: Its Manifestations in Infants and Children," *Journal of Pediatrics*, XIV, 755-760 (June, 1939).

NEURATH, H. Biochemistry.

- "Diffusion of Proteins," *Cold Spring Harbor, Symposium on Quantitative Biology*, VI, 196-207 (1938).
- (with H. B. Bull), "Surface Activity of Proteins," *Chemical Reviews*, XXIII, 391-435 (Dec., 1938).
- (with A. M. Saum), "Denaturation of Serum Albumin: Diffusion and Viscosity Measurements of Serum Albumin in Presence of Urea," *Journal of Biological Chemistry*, CXXVIII, 347-362 (April, 1939).

NEWMAN, G. C. Medicine.

- (with C. W. Hooker), "Effect of Iodine on Interstitial Cells of Testis," *Endocrinology*, XXIV, 720-722 (May, 1939).

ORGAIN, E. S. Medicine.

- (with M. A. Poston), "Immunologic Studies on Patients Suffering from Bacterial Endocarditis," *Proceedings of the Society for Experimental Biology and Medicine*, XL, 284-286 (Feb., 1939).
- PACHMAN, D. J. Pediatrics.
"Chronic Gaucher's Disease," *American Journal of Diseases of Children*, LVI, 248-265 (Aug., 1938).
- PARSONS, P. B. Radiology.
—(with M. A. Poston), "Pathology of Human Brucellosis: Report of 4 Cases with 1 Autopsy," *Southern Medical Journal*, XXXII, 7-13 (Jan., 1939).
- PEARSE, R. L. Obstetrics and Gynecology.
—(with R. A. Ross), "Incidence of Proliferative Ovarian Cysts," *Southern Medicine and Surgery*, C, 371-373 (Aug., 1938).
—(with B. Carter and W. L. Thomas), "Dermoid Cyst of Ovary with Perforation of Urinary Bladder and of Sigmoid," *American Journal of Obstetrics and Gynecology*, XXXVII, 148-153 (Jan., 1939).
- PERSONS, E. L. Medicine and Dermatology.
—(with H. I. Harvey, D. T. Smith, and M. V. Burns), "Effect of Various Fractions of Liver on Experimental Canine Blacktongue," *Journal of Nutrition*, XVI, 153-171 (Aug., 1938).
- PORTER, F. R. Hospital Administration.
***"What Is a Charity Patient?" *Proceedings of the Joint Meeting of the North Carolina, South Carolina and Virginia Hospital Associations*, pp. 63-65 (April, 1934).
- POSTON, M. A. Bacteriology.
—(with E. E. Menefee, Jr.), "Acute Brucellosis with Bacteremia and Oral Lesions: Treatment with Immune Human Blood," *New England Journal of Medicine*, CCXIX, 796-797 (Nov., 1938).
—(with E. S. Orgain), "Immunologic Studies on Patients Suffering from Bacterial Endocarditis," *Proceedings of the Society for Experimental Biology and Medicine*, XL, 284-286 (Feb., 1939).
—(with E. E. Menefee, Jr.), "Effects of Sulfanilamide on *Brucella Melitensis*, Var. *Melitensis*, Abortus and Suis," *Journal of Bacteriology*, XXXVII, 269-276 (March, 1939).
—(with E. E. Menefee, Jr.), "Chronic Brucellosis of 25 Months' Duration: Report of Case with Necropsy Findings," *Southern Medical Journal*, XXXI, 1061-1062 (Oct., 1938).
—(with E. E. Menefee, Jr.), "Significance of Standard Laboratory Procedures in Diagnosis of Brucellosis," *American Journal of the Medical Sciences*, CXCVII, 646-653 (May, 1939).
—(with P. B. Parsons), "Pathology of Human Brucellosis: Report of 4 Cases with 1 Autopsy," *Southern Medical Journal*, XXXII, 7-13 (Jan., 1939).
- QUERY, R. Z. Medicine.
"Pneumococcus Type VII Meningitis, Treated with Sulfanilamide and Specific Serum, With Recovery," *Journal of the American Medical Association*, CXI, 1373-1374 (Oct., 1938).
- RAPER, J. S. Pathology.
—(with D. H. Sprunt and C. W. Hooker), "Relation of Spermatogenesis to Factor in Testis which Increases Tissue Permeability," *Proceedings of the Society for Experimental Biology and Medicine*, XLI, 398-402 (June, 1939).

RASMUSSEN, L. P. Pediatrics.

—(with J. M. Arena), "Diphtheritic Polyneuritis: Report of 9 Cases," *Journal of Pediatrics*, XIII, 352-356 (Sept., 1938).

REEVES, R. J. Roentgenology.

—(with J. E. Morgan), "Photo-electric Densitometer," *American Journal of Roentgenology and Radium Therapy*, XL, 610-615 (Oct., 1938).

—(with J. M. Ruffin), "Value of Gastroscopy in Diagnosis of Phytobezoar: Case Report," *American Journal of Digestive Diseases*, V, 745-746 (Jan., 1939).

REISER, R. Medicine.

"Effect of Phospholipid Ingestion Upon Gas Exchange in Man," *American Journal of Physiology*, CXXVI, 109-119 (May, 1939).

ROSS, I. S. Pathology and Anatomy.

"Pulmonary Epithelium and Proliferative Reactions in Lungs: Study of Cellular Response in Lungs After Intratracheal Injection of Toxic and Nontoxic Foreign Substances," *Archives of Pathology*, XXVII, 478-496 (March, 1939).

ROSS, R. A. Obstetrics and Gynecology.

**"What the Hospital Can Do to Reduce Infant Mortality: Discussion," *Proceedings of the Joint Meeting of the North Carolina, South Carolina, and Virginia Hospital Associations*, pp. 63-65 (April, 1934).

"Incidence of Eclampsia in North Carolina," *Phi Chi Quarterly*, p. 35 (Oct., 1938).

"Study of Endometrium as Indicator," *Southern Medical Journal*, XXXII, 52-56 (Jan., 1939).

—(with R. L. Pearse), "Incidence of Proliferative Ovarian Cysts," *Southern Medicine and Surgery*, C, 371-373 (Aug., 1938).

—(with D. K. Spelt), "Intra-uterine Conditioning of Human Fetus," *Watts Hospital Bulletin*, III, 9-II (April, 1939).

RUFFIN, J. M. Medicine.

"Treatment of Pellagra," *Journal of the South Carolina Medical Association*, XXXV, 107-108 (April, 1939).

—(with M. Dick), "Significance of Gastric Acidity after Histamine Stimulation: Statistical Study of 2877 Gastric Analyses," *Annals of Internal Medicine*, XII, 1940-1947 (June, 1939).

—(with R. J. Reeves), "Value of Gastroscopy in Diagnosis of Phytobezoar: Case Report," *American Journal of Digestive Diseases*, V, 745-746 (Jan., 1939).

—(with D. T. Smith), "Treatment of Pellagra with Special Reference to Use of Nicotinic Acid," *Southern Medical Journal*, XXXII, 40-47 (Jan., 1939).

SANGER, P. W. Surgery.

—(with D. Hart), "Role of Respiratory Tract in Contamination of Air: Comparative Study," *Archives of Surgery*, XXXVIII, 788-796 (April, 1939).

—(with D. Hart), "Effect on Wound Healing of Bactericidal Ultraviolet Radiation from Special Unit Experimental Study," *Archives of Surgery*, XXXVIII, 797-805 (May, 1939).

SCHIEBEL, H. M. Surgery.

—(with D. Hart), "Role of Respiratory Tract in Contamination of Air: Comparative Study," *Archives of Surgery*, XXXVIII, 788-796 (April, 1939).

SCHLAYER, C. Medicine.

"Manometrische Bestimmung von Aminosäuren mit Ninhydrin im Warburg-Apparat," *Biochemische Zeitschrift*, CCXCVII, 395-397 (1938).

- "Sauerstoffzehrung des Urins und Sauerstoffdruck der Niere," *Klinische Wochenschrift*, XVIII, 598-599 (April, 1939).
- SCHNOOR, T. G. Bacteriology and Medicine.
"Occurrence of Monilia in Normal Stools," *American Journal of Tropical Medicine*, XIX, 163-169 (March, 1939).
- SHARP, D. G. Surgery and Bacteriology.
"Lethal Action of Short Ultraviolet Rays on Several Common Pathogenic Bacteria," *Journal of Bacteriology*, XXXVII, 447-460 (April, 1939).
- SMITH, D. T. Bacteriology.
—(with S. G. Smith), "Nicotinic Acid in Treatment of Canine Blacktongue and Human Pellagra," *Science*, LXXXVIII, 436-437 (Nov., 1938).
—(with H. I. Harvey, E. L. Persons, and M. V. Burns), "Effect of Various Fractions of Liver on Experimental Canine Blacktongue," *Journal of Nutrition*, XVI, 153-171 (Aug., 1938).
—(with D. S. Martin), "Blastomycosis (American Blastomycosis, Gilchrist's Disease); Review of Literature," *American Review of Tuberculosis*, XXXIX, 275-304 (March, 1939).
—(with D. S. Martin), "Blastomycosis (American Blastomycosis, Gilchrist's Disease); Report of 13 New Cases," *American Review of Tuberculosis*, XXXIX, 488-515 (April, 1939).
—(with J. M. Ruffin), "Treatment of Pellagra with Special Reference to Use of Nicotinic Acid," *Southern Medical Journal*, XXXII, 40-47 (Jan., 1939).
- SMITH, S. G. Medicine.
—(with G. Margolis, and L. H. Margolis), "Cure of Experimental Canine Blacktongue with Optimal and Minimal Doses of Nicotinic Acid," *Journal of Nutrition*, XVI, 541-548 (Dec., 1938).
—(with L. H. Margolis and G. Margolis), "Secondary Deficiency of Vitamin B₁ and Riboflavin in Blacktongue Producing Diet," *Journal of Nutrition*, XVII, 63-76 (Jan., 1939).
—(with D. T. Smith), "Nicotinic Acid in Treatment of Canine Blacktongue and Human Pellagra," *Science*, LXXXVIII, 436-437 (Nov., 1938).
- SPRUNT, D. H. Pathology.
—(with C. W. Hooker and J. S. Raper), "Relation of Spermatogenesis to Factor in Testis which Increases Tissue Permeability," *Proceedings of the Society for Experimental Biology and Medicine*, XLI, 398-402 (June, 1939).
- SWETT, F. H. Anatomy.
"Speed of Prospective-polarity Reversal in Transplanted Limbs of Amblystoma Punctatum (Linn)," *Journal of Experimental Zoology*, LXXXI, 127-134 (June, 1939).
- TAYLOR, H. M. Biochemistry.
—(with J. S. Bradway), "Teaching of Legal Medicine," *American Journal of Medical Jurisprudence*, II, 210-213 (May-June, 1939).
- THOMAS, W. L. Obstetrics and Gynecology.
—(with B. Carter and C. P. Jones), "Attempted Cultivation of Donovan Bodies from Granuloma Inguinale," *Journal of Infectious Diseases*, LXIV, 314-316 (May-June, 1939).
—(with B. Carter and R. L. Pearse), "Dermoid Cyst of Ovary with Perforation of Urinary Bladder and of Sigmoid," *American Journal of Obstetrics and Gynecology*, XXXVII, 148-153 (Jan., 1939).
- WEBSTER, M. D. Physiology and Pharmacology.
"Change in Amino Acid Oxidation Following Dissociation of Staphylococcus Aureus," *Proceedings of the Society for Experimental Biology and Medicine*, XL, 289-292 (Feb., 1939).

WILBUR, E. L. Pathology.

"Myocardial Tuberculosis; Cause of Congestive Heart Failure," *American Review of Tuberculosis*, XXXVIII, 769-776 (Dec., 1938).

WOODHALL, B. Neurosurgery.

"Acute Head Injuries—With Particular Reference to Temperature, Pulse and Respiration Curves," *Virginia Medical Monthly*, LXV, 415-418 (July, 1938).

—(with R. W. Graves and J. W. Beard), "Experimental Production of Tumors of Brain with Shope Rabbit Papilloma," *Archives of Surgery*, XXXVIII, 457-470 (March, 1939).

YATES, A. Biochemistry.

—(with E. P. Alyea and W. E. Daniel), "Sulfanilamide and Disulfanilamide Concentrations in Blood and Urine," *Journal of Urology*, XLI, 14-30 (Jan., 1939).

YOUNGSTROM, K. A. Anatomy.

"On Relationship between Choline Esterase and Development of Behavior in Amphibia," *Journal of Neurophysiology*, I, 357-363 (July, 1938).

DEPARTMENT OF PUBLIC RELATIONS AND ALUMNI AFFAIRS

To the President of the University:

Much of the time of the department personnel during the year 1938-39 was consumed with matters pertaining to various causes of the Duke University Centennial. The pressure of Centennial activities, along with the normally expanding work of the Department in its two divisions and various bureaus, made the year under consideration an exceedingly busy one. Some additional space for the work was provided, but this is still a problem for which it is hoped a solution will be found in the near future.

The strenuous program of the Centennial Year entailed additional obligations of service upon members of the regular Staff and necessitated a small increase of personnel. The constant loyalty and untiring diligence of those connected with the Department in various capacities were outstanding, and I desire to express sincere appreciation of the fine spirit manifested at all times.

DIVISION OF PUBLIC RELATIONS

The activities of the Division, as indicated above, were expanded to a considerable extent to meet Centennial needs. The number of newspapers and news agencies supplied by the University News Service was increased; photographs and other matter were distributed in enlarged volume, and pictorial literature relating to the University, as supplied by the Department, was in increased demand throughout the year.

The service involved in connection with entertainment on the campus of various groups during the Centennial Year constituted an increasingly important part of the activities of the Division. This was true not only in connection with meetings incident to the Centennial Celebration itself but to the various symposia and other events preceding it. University House, formerly the B. N. Duke home on Chapel Hill Street and previously known as Four Acres, was used to excellent advantage in this connection. This palatial home was given to the University during the year by Mrs. Mary Duke Biddle and is proving a most valuable addition to the University's facilities.

The number of University speakers supplied by the Speakers' Bureau for meetings of various kinds away from the campus was larger than ever before. In a number of cases addresses on the Centennial were requested by non-alumni groups. The number of civic club and convention requests, as well as requests for commencement speakers, reached a new high point. The meeting of these demands at the same time that campus activities were increasing rapidly was difficult, but through the cordial co-operation of members of the Faculty the situation was handled in what we have been assured was a very satisfactory manner.

Particularly effective use was made during the year of the Duke motion pictures made by Charles A. Dukes, Assistant Director of the Depart-

ment. Especially gratifying was the number of requests for such pictures coming from groups which were in no way affiliated with the University as alumni or otherwise. It indicated a constantly growing interest on the part of the public in general in matters pertaining to Duke University, its past history, its present achievements, and its prospects for future usefulness. The pictures were shown about two hundred times.

Naturally the calls upon the University Information Service were increased to a considerable extent during the year. This service is being used more and more each year by members of the Faculty and student body, as well as others. The Division of Public Relations, through this and other services rendered, is becoming recognized to a greater extent with each passing year as a clearinghouse for information and help along various lines by those on the campus as well as visitors. The effort to keep at all times as complete information as possible regarding general University events, as well as departmental activities, is serving a really useful purpose, according to expressions from members of various groups taking advantage of the facilities offered by the Division.

Reference was made in the last report to the establishment of the University Appointments Office on a full-time basis with James R. Simpson as Director. The work was materially expanded during the year 1938-39, and the wisdom of putting the placement work of the institution on an enlarged basis has been amply justified, in my opinion. It is proving a source of much valuable assistance to alumni, as well as business executives and others who are using the facilities of the office.

In the News Service and other publicity releases during the year, continued effort was made to emphasize the more important features of the institution's inner life and development rather than the more spectacular matters pertaining to the size of its divisions and departments, the magnitude of its buildings, and the extent of its physical equipment. Information of this kind is not always as interesting to the average reader as news of a more spectacular character in connection with the development of an institution, but it is vitally important that it be disseminated if those away from the campus are to gain anything approaching a correct impression of the University's place as an agency of the processes of higher learning. Especially has an effort been made during the year to inform the reading public of research activities at the University, as well as of the constant progress being made in the development of a well-rounded curriculum.

DIVISION OF ALUMNI AFFAIRS

As in the case of the Division of Public Relations, the Division of Alumni Affairs had an unusually busy year, much effort being concentrated upon the intensifying of alumni support of the institution throughout the Centennial Year. Constant assistance was rendered the Centennial Committee in the matter of securing financial and other co-operation from the former students of Trinity College and Duke University. Although not as much was accomplished in this line as we might have desired, I am confident that the activities pertaining to alumni co-operation in Centennial causes did much to bring alumni to a fuller realization of

the achievements of the institution and their responsibilities to the end that those achievements might be expanded in the years ahead.

Particular attention was paid by the Staff of the Alumni Office during the year to the effort to arouse interest in scholarship projects, both on the part of individuals and of class and local alumni groups. A substantial increase in scholarships was the chief alumni objective in connection with the Centennial, and this effort is to be vigorously pressed in the months that are ahead. It has been made clear to our alumni through personal contacts and through *The Register* and other mailings from the Alumni Office, that Duke University can use to excellent advantage a large number of additional scholarships. As a matter of fact, our showing in this respect is much less impressive than that of other institutions of comparable size and importance, and this fact has been emphasized in various ways.

Another phase of Alumni Office effort during the Centennial Year was concerned with the correction of the impression, current among many alumni as well as members of the general public, that Duke University, profiting as it has by the donations of generous benefactors, has as much financial support as it will ever need. It has been pointed out in different ways that, in addition to all the funds that have been received, several million dollars of added funds could be used to advantage if available in research alone, to say nothing of the scholarship and other needs referred to above.

Apart from the work pertaining especially to the promotion of Centennial causes, various local alumni groups were encouraged to initiate all-the-year programs of activity and to work along particular lines where especially effective service could be rendered the University in their various localities. For instance, the New York Alumni group, through a special committee appointed for that purpose, has been doing notably effective work in interviewing prospective students from the New York area. This is a form of needed co-operation which is greatly appreciated by the University officials. Other groups, particularly in the larger centers, will undertake similar work. In several communities weekly or biweekly luncheon meetings have been inaugurated, and in practically all of the local alumni associations at least one meeting is being held in the spring in addition to the annual meeting in the fall.

Again the plan of holding Duke University Day meetings at different times throughout the months of October and November, with a few in early December, has been carried out with excellent results. The meetings held during the year reached a new high point in interest and attendance. Nearly seventy meetings were held.

One especially gratifying feature of the year was the organization of new alumni groups. Four new local associations were formed, to say nothing of the reorganization of several which had been comparatively inactive.

The latest of the special groups to be organized within the General Alumni Association is that of the College of Engineering Alumni. This group, as well as those of the School of Religion, the School of Law, and

the School of Nursing, has been manifesting much enthusiasm, and excellent results are already apparent. Incidentally, the Engineering Alumni held their first Homecoming Day, and the attendance and interest were exceedingly gratifying.

There was increased interest during the year in the various occasions held annually under the supervision of the Alumni Office. The registration of alumni on Homecoming Day was the largest in the entire history of these annual occasions; the same was true of alumnae attendance at the May Day and Alumnae Homecoming exercises. The second annual Alumnae Week-end, held in co-operation with the Woman's Centennial Symposium, was notably successful, and arrangements for the third Alumnae Week-end were started immediately. There was further increase during the year in the amount of correspondence handled in the Alumni Office, this having nearly trebled in the last ten years.

The distribution of Duke alumni and alumnae as of June 30, 1939, was as follows:

Alumni in North Carolina.....	4,668
Alumnae in North Carolina.....	2,026
Total Alumni and Alumnae in North Carolina.....	6,694
Alumni out of State.....	4,154
Alumnae out of State.....	1,636
Total Alumni and Alumnae out of State.....	5,810
Alumni in Foreign Countries.....	129
Alumnae in Foreign Countries.....	32
Total Alumni and Alumnae in Foreign Countries.....	161
Total Alumni.....	8,951
Total Alumnae.....	3,714
Total Alumni and Alumnae.....	12,665

It was possible during the year for members of the Staff of the Alumni Office to make more personal contacts with local alumni associations than ever before. The intention is to continue and expand these contacts as much as possible. Also, an effort was made with some success during the year to enlarge the scope of contacts with students on the campus, our future alumni, and this endeavor, too, will be continued in every possible way.

It was with much regret that the resignation of Miss Elizabeth Aldridge, Assistant Director of Alumni Affairs, was accepted as of June 10. She was married on June 26 to Dr. Alfred Henderson, and they are now living at Berea, Kentucky, where Dr. Henderson is professor of history in Berea College. She had been for years a particularly valued member of the Staff of the Division of Alumni Affairs and of the University. Her work in different lines was notably effective, her service in the compilation of alumni records and in the promotion of alumnae activities having been especially valuable. She was at all times energetic and efficient

and loyal in promoting the best interests of the alumni and of the University. Miss Anne Garrard, alumna of the Class of 1925, succeeded Miss Aldridge, after a successful service of four years as Dean of Women at Greensboro College. Her intimate acquaintance with Duke alumni affairs enabled her to go on with the work without the necessity of spending months in getting acquainted with its details. She is already rendering valuable service, particularly in the promotion of alumnae activities to which most of her time will be given. Miss Janet Ormond, who for the past several years has been working with much success on alumni records, is continuing her services in that field as Alumni Recorder.

HENRY R. DWIRE,
Director.

INDEX

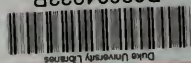
- Activities
 - Extracurricular, 64, 72
 - Recreational, 147
 - Religious, 144
 - Student, 64, 72, 82-83
- Admissions, 52
- Centennial Celebration, 11, 91, 95, 139, 151-152, 183-185
- Chapel, The Duke, 144
 - Church, Duke University, 144-145
 - Easter Service, 145
- Clinics, 103
- Curriculum, 21
- Dean's List, 27
- Deaths, 17, 102, 152
- Engineering, The College of, 80
 - Curriculum, 81
 - Development, 80
 - Enrollment, 81
 - Laboratories, 80
 - Student Activities, 82-83
- Enrollment, 24, 68, 81, 86, 93, 95, 102, 109, 123, 146
- Fellowships, 85, 91, 100
- Few Quadrangle, 84, 103
- Forestry, The School of, 109
 - Arboretum, 118
 - Collections, slide, 111; wood, 110
 - Duke Forest, 112
 - as demonstration center, 118
 - fire protection, 115
 - marketing of forest products, 115
 - planting, 112
 - public use, 116
 - silvicultural operations, 113
 - state game refuge, 117
- Educational Program, 109
- Future Needs, 111
- National Youth Administration Activities, 120
- Publications, 120
- Research, 119
- Staff Activities, 121
- Fraternalities
 - Scholarship, 64
- Gifts, 11, 17, 103, 107
- Graduate School, 84
 - Admission into Association of American Universities, 84
 - Co-operation with the University of North Carolina, 85
- Dining room, 84
- Enrollment, 86
- Few Quadrangle, 84
- Growth, 84
- Needs:
 - Fellowships, 85
 - Office space, 84
 - Quality of students, 84
 - Requirements for A.M., 84-85
 - Requirements for Ph.D., 84
 - Status, 84
- Gymnasium, 12, 146
- Law, The School of, 95
 - Centennial Celebration, 95
 - Enrollment, 95
 - Faculty Activities, 97
 - Graduate Scholarships, 100
 - Library, 100
 - Log Cabins, 95
 - Publications, 96
- Libraries, The University, 133
 - Acquisitions, 133; notable, 135
 - Building, enlargement of, 141
 - Departmental, 140
 - Expenditures, 133
 - George Washington Flowers Collection, 137; Centennial Exhibit of, 139
 - Staff, 142; its work, 142
 - Use of, 134
- Medicine, The School of, 102
 - Clinics, 103
 - Enrollment, 102
 - Faculty, 104
 - Few Quadrangle, 103
 - Gifts, 103, 107
 - Growth, 102, 106
 - Needs, 105
 - New building, 103
 - Nursing, The School of, 104
 - Progress, 102, 106
 - Psychiatry, 103
 - Research, 102
 - Statistics, 106-107
- Physical Education and Athletics, Department of, 146
 - Enrollment, 146
 - Growth, 146
 - Gymnasium, 146
 - Intercollegiate Sports, 149-150
 - Intramural Sports, 147-148
 - President of Duke University, report of, 7

- Athletics, 12-15
- Centennial Celebration, 11
- Chapel, Duke, 10
- College teaching, 15-16
- Death, 17
- Department of Psychiatry and Mental Hygiene, 11-12
- Engineering, College of, 7-9
- Gifts, 11, 17
- Graduate School, 7, 9-10
- Gymnasium, 12
- Needs, 11, 15, 17
- University, progress of, 7
- Press, The University, 151
 - Books, in process of publication, 151; issued, 151
 - Centennial Contest, 151-152
 - Circulation, 152
 - Editorial Changes, 152
 - Financial Aid, 151
 - Needs, 152
- Public Relations and Alumni Affairs, Department of, 183
 - Alumni Affairs, Division of, 184
 - Centennial Celebration, 183-185
 - Organization of, 185-186
- Public Relations, Division of, 183
 - Appointments Office, 184
 - Information Service, 184
 - Needs, 183
 - News Service, 183
 - Speakers' Bureau, 183
- Publications by the Faculties, 155
 - Graduate School, 155
 - School of Forestry, 170
 - School of Law, 169
 - School of Medicine, 171
 - School of Religion, 163
 - Undergraduate Colleges, 155
- Religion, The School of, 88
 - Activities, 88
 - Addresses, by Faculty, 92
 - Centennial Celebration, 91
 - Enrollment, 93
 - N. Edward Edgerton Scholarship Fund, 91
 - Publications, of Faculty, 92
 - Representation, by colleges, 94; by denominations, 93; by states, 93
 - Research, Council on, 153
 - Funds, 153
 - Publications, 154
- Summer School, The, 123
 - Calendar, 124
 - Contributions, 124
 - Enrollment, 123, 127; distribution of, 127-130
 - Graduate work, 125
 - Holding power, 129-130
 - Requirements for degrees, 125-126
 - Terms, length of, 125
- Trinity College, 21
 - Admissions, 1938-39, 52
 - College education, 21-22
 - Counseling, 64
 - Curriculum, 23
 - Dean's List, 27
 - Departmental Honors, 26
 - Distribution of students, by departments, 24; by groups, 24
 - Divisional Honors, 26
 - Extracurricular Activities, 64
 - Freshmen, 53, 65
 - General Honors, 25
 - Honors work, 25
 - Instruction in 1938-39, 27
 - Records Office, 53
 - Undergraduate Instruction, 22
- Woman's College, The, 68
 - Academic work, 71
 - Activities, extracurricular, 72
 - Admissions, 69
 - Enrollment, 68
 - Religious life, 69, 78





D02604933R



D02604933R

Duke University Libraries